

## **ENVIRONMENTAL ASSESSMENT (EA) ADOPTION AND FINDING OF NO SIGNIFICANT IMPACT (FONSI)**

### **U.S. COAL COMPANY DEEP MINE NO. 11, OSM Permit No. TN-014 CAMPBELL AND SCOTT COUNTIES, TENNESSEE**

#### **Background**

The proposed Deep Mine No. 11 is located approximately 2.4 miles west of the Turley community in Campbell and Scott Counties, Tennessee. The company would use conventional underground mine techniques to extract approximately 2,600,000 million ton of Red Ash coal over a period of 7.3 years. The 35.7 acre mine permit area includes 29.5 acres for the existing haul road and a 4.9 acres mine face-up area for a total of 34.4 surface acres of disturbance. The total affected acreage, including underground mine workings, is 1,135 acres, including coal underlying the TVA Koppers Coal Reserve. The proposed permit area was previously surface mined in the 1960s and 1970s. The mine site is in the New River watershed at approximately the 2,320 ft. elevation and is drained locally by Simpson Branch, a tributary of Straight Fork. The haul road is primarily in the Montgomery Fork watershed in the New River basin. The disturbed areas within the proposed permit area, with the exception of the haul road and the sediment basin, would be reclaimed using all reasonably available spoil.

The mine portal would be inside the Royal Blue Wildlife Management Area (WMA). The coal underlies portions of both the Royal Blue and the adjacent Sundquist WMA. Tennessee Wildlife Resources Agency (TWRA) is the surface owner of the proposed underground mine face-up area and a portion of the proposed haul road. Cumberland Timber Company, LLC owns the portion of the proposed haul road outside of the WMA.

The Office of Surface Mining-Knoxville Field Office (OSM) provided a 30-day period for submittal of comments on the proposed mining application. A public hearing was not requested. Comments were received from two federal and three state agencies. Informal consultation was undertaken with U.S. Fish and Wildlife Service (FWS). After considering and resolving all comments, OSM subsequently completed an EA and FONSI, including a Cumulative Hydrologic Impact Assessment, on July 13, 2004 (attached).

TVA has leased the mineral rights to U.S. Coal for underground mining on all seams of coal above and including the Red Ash seam. Under the terms of TVA's coal lease, the company cannot not initiate or conduct any mining activity under a proposed general mining plan prior to receiving TVA's written approval. Such approval cannot be given until satisfactory completion of an environmental review. Based on an independent review of the OSM EA, TVA has determined that the EA adequately addresses the impacts of this mining proposal and is herewith adopting the EA. TVA's adoption of the OSM EA on Deep Mine No. 11 completes the environmental review required by TVA's coal lease.

## **Alternatives**

OSM considered three alternatives. Under Alternative 1, OSM would issue a permit to U.S. Coal for underground mining. The mine is expected to have an average annual production of approximately 360,000 tons over a period of 7.3 years. The company would use bulldozers, front-end loaders, and trucks for mining and reclamation operations within the proposed 35.7 acre permit area. Land clearing operations on the 4.9 acre mine face up area would eliminate the successional vegetation that has developed over the last 30 years and existing soils on the mine face-up area would be removed. The existing unpaved haul road would require some limited improvement work in order to be used for hauling coal, resulting in a little additional disturbance of vegetation/habitat.

Both the underground mine face-up and load-out areas are located on previously mined benches on which highwalls were left exposed. Very little blasting would be required. Coal fines and bedded coal associated with the coal stockpile area would be removed from the site for disposal at U.S. Coal's permitted preparation plant and refuse area, in accordance with the plans approved for the refuse area.

The disturbed areas within the proposed permit area, with the exception of the haul road and the sediment basin, would be reclaimed using all reasonably available spoil. During reclamation, the exposed coal seam would be covered with a minimum of 5 ft. of spoil materials. After the backfilled areas are graded, topsoil substitute materials would be revegetated with a seed mixture capable of producing a permanent, diverse, and effective ground cover. Shrubs would also be established. The approved postmining land use would be fish and wildlife habitat and recreation. The surface owner has requested the haul road be left as a permanent structure. The buildings and portable structures would be removed.

Under Alternative 2, OSM would disapprove the permit application. The no action alternative (Alternative 3) was considered, but not evaluated, because the Federal Program for Tennessee requires that OSM approve or disapprove a permit application for surface coal mining reclamation operations.

## **Impacts Assessed**

Under Alternative 1, there would be temporary changes to topography; land use; plants, wildlife, and associated habitat; air quality; esthetics and hydrology during mining. Short term or temporary socioeconomic impacts are anticipated as well. Impacts are predicted to be initially adverse and diminish to minor over the life of mine period (7.3 years) and the final bond release period (12.3 years). In addition, some permanent or long-term changes would occur including alteration of the geologic strata, increased infiltration rates through the backfilled material, and postmining vegetative cover. OSM predicts that proper implementation of the proposed operation and reclamation plan, including the hydrologic reclamation plan (HRP), would prevent or minimize any long-term adverse effects that may occur from the permanent changes.

Wildlife habitat would be eliminated within the mine face-up portion of the proposed permit area (approximately 5 acres), resulting in displacement of the more mobile species and some direct mortality of slow-moving terrestrial species. Vegetation would be temporarily eliminated. However, site reclamation, including establishment of the grass-legume herbaceous ground cover and shrubs and retention of the sediment basin

would result in enhanced wildlife habitat, providing opportunity for the displaced species to re-inhabit the area as well as new plant and animal species. Little change is anticipated on the 29.5 acres of haul road, since little or no additional disturbance to existing vegetation/habitat would occur. Due to the small amount of acres to be impacted, and the large amount of similar habitat that is available adjacent to the project area, impact to terrestrial wildlife and vegetation in the region would be temporary and impacts would be insignificant.

Based on the results of the CHIA (discussed below), the proposed mining would have only temporary impact to fishery resources. Potential impacts to aquatic habitat would be mitigated by appropriate sediment control and monitoring measures.

OSM informally consulted with the FWS regarding potential impacts on threatened and endangered species from the proposed Deep Mine No. 11. In a letter to the applicant dated January 8, 2002, the FWS indicated that the Indiana bat may be affected by the mining activity. Based on additional information about existing habitat conditions at the subject site provided by U.S. Coal, Inc. (February 28, 2002 letter to Bill Ferrell, IRTEC, FWS stated in an April 22, 2002, letter to OSM that the Endangered Species Act requirements had been fulfilled and that "implementation of any protection and enhancement measure for the Indiana bat would be appreciated." However, when TWRA notified OSM of the discovery of blackside dace in Straight Fork on June 10, 2002, informal consultation was reinitiated. A July 18, 2002, letter from FWS concluded that "the potential impacts to the blackside dace have been adequately addressed at this time." OSM therefore concluded in the attached EA that the proposed mining activities should have "no effect on any threatened or endangered species, or result in detracting of adverse modification of critical habitats." TVA concurs in this finding. The referenced letters are attached.

Fugitive dust and noise would result primarily from the expected 36 coal truck round trips per workday and from mine operations. No one lives within 1.5 miles of the proposed mine face-up or along the permitted portion of the haul road. Only one residential structure is located within 0.1 miles of the unpaved county road between the permitted haul road and the paved county road. With the implementation of the air pollution control plan included in the SMCRA permit, affects on air quality anticipated to occur during the 7 years of mining activity are expected to be temporary and insignificant. Noise associated with hauling coal approximately 5 miles to the processing facility via paved public roads would have a marginal affect, during daylight hours, excluding Sundays, on the quality of life of those who live along the road; and even these marginal impacts would be limited to the life of the mine. Noise from blasting would be infrequent and very brief, resulting in nuisance-type impacts on off-site residences.

Measures have been incorporated into the approved mine plan to prevent adverse impacts to public parks. It was determined that the nearest parks, Cove Lake State Park (6.5 miles to the southeast) and The Big South Fork National River and Recreation Area (13.5 miles west) would not be adversely impacted by the proposed action. The Cumberland Trail State Park (CTSP), a portion of which lies within Royal Blue WMA, is located approximately 1.5 miles from the south end of the proposed haul road and approximately 4 miles from the proposed mine site. The north facing mine entrance would not be in the viewshed of the trail, although some portions of the existing haul road would be. Fugitive dust control measures in the mine plans would control visual impacts from dust and noise from trucks at this distance would not likely be audible. Impacts from noise and dust could have minor adverse affects on users of the RBWMA

and the CTSP. These impacts would likely continue over the 7.3-year life of mine and may result in some users moving their recreational activities to other portions of the 50,000-acre WMA.

The proposed mine is located in the New River watershed in OSM Cumulative Impact Area No. 8. Two Straight Fork tributaries would be affected by mine operations. Simpson Branch currently receives run-off from the proposed mine face-up area and Neal Branch receives runoff from a short section of the haul road. Most of the haul road drains to Jenny Creek and Roach Creek, tributaries of Montgomery Fork (New River watershed). A Cumulative Hydrologic Impact Assessment (CHIA) was prepared for the two subwatersheds to be impacted--Montgomery Fork (TS-4) and Straight Fork (TS-6) (May, 16, 2003, updated April 26, 2004). Permanent mining-related impact to local ground water systems in the immediate vicinity of the proposed mine site are anticipated and described in the CHIA (attached). However these impacts are unlikely to impact any ground water users, since Deep Mine No. 11 would be over 1.5 miles from the nearest potable water wells. The CHIA concluded that surface and ground water quality and quantity would not be significantly affected by the proposed mining and reclamation operations. As a result, no adverse impact to the hydrological balance would likely result from the proposed activities.

Geologic sampling and overburden analyses by U.S. Coal did not identify a potential for the formation of acid or toxic drainage from geologic materials above or below the Red Ash seam. However OSM noted that the coal seam itself may be a potential source of acid production. Based on past local experience in mining Red Ash coal, adverse impacts to water quality are not anticipated. The sampling analysis also indicated that spoil materials associated with 400 feet of haul road located on the Big Mary coal seam bench, were a potential source of acid production. A toxic material handling plan, developed to address potential issues associated with disturbing this material during road improvements, has been included in the mine permit. All waste materials associated with the Big Mary seam would be disposed of at U.S. Coal's permitted preparation plant and permitted refuse storage area.

In a letter dated December 6, 2001, the Deputy State Historic Preservation Officer stated that the proposed mining operation would have no effect on National Register of Historic Places (NRHP) listed or eligible properties. Since the 4.9 acre mine face-up area was previously mined and an existing haul road would be used, no effects on cultural resources are expected.

Beneficial socioeconomic impacts from jobs creation and additional tax revenue are anticipated. U.S. Coal would employ approximately 50 people over the life of the mine, as well as purchase goods and services locally. Potential local government expenses for the maintenance public road other infrastructure would be compensated by a state and local tax collected from the mine company on a per ton basis. Communities in the vicinity of the proposed permit area include a disproportionate level of low income households. However, only minor to moderate cumulative impacts to communities in the vicinity are anticipated; therefore, these communities are not expected to be adversely impacted.

In sum, permanent and temporary impacts to resources are anticipated as a result of the proposed issuance of this permit. These impacts would be mitigated by the implementation of the proposed mining and reclamation plan, which includes an HRP

and a Toxic Materials Handling Plan, and minimized or abated during and following site reclamation.

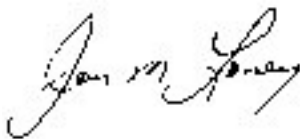
If the permit were denied (Alternative 2), recovery of the coal would not occur. The area would continue to be managed as part of the Royal Blue WMA by the surface owner, Tennessee Wildlife Resources Agency, under a land management plan.

### **TVA Review**

TVA participated as a cooperating agency in the preparation of the EA for the proposed U.S. Coal Company Deep Mine No. 11. TVA staff reviewed and commented on the initial permit application as well as the preliminary draft EA. For cumulative effects analysis, TVA reviewed the original CHIA and the update prepared for watersheds affected by this project. In addition, in 1990, TVA reviewed and adopted an OSM Final Environmental Impact Statement, Comprehensive Impacts of Permit Decisions Under the Tennessee Federal Program. In its notice of adoption (55 Federal Register 23338, June 7, 1990), TVA determined that the OSM FEIS adequately assessed the potential cumulative environmental impacts of coal leasing decisions that TVA may make respecting its coal properties in Tennessee, and that the proposed actions evaluated were substantially the same as those which may occur under TVAs coal leasing program. The 1990 FEIS, together with the CHIA, adequately assess the cumulative effects of past, present, and reasonably foreseeable future actions on resources affected by the Deep Mine No. 11 proposal.

### **Conclusion and Finding**

TVA has reviewed the OSM EA and determined that the scope, alternatives considered, and content of the EA are adequate. Based on its independent review, TVA has decided to adopt the July 13, 2004, OSM EA and April 26, 2004, CHIA. The decision documents for the environmental review of Deep Mine 11 are attached and incorporated by reference. Contingent on the implementation of measures incorporated in the SMCRA permit application to prevent, minimize, or mitigate impacts to protected species, water quality, hydrologic regime, air quality, and noise, TVA concludes that its approval, under the current lease, of U.S. Coal's proposed mining plan would not have a significant impact on the quality of the environment. Accordingly, an environmental impact statement is not required.



July 21, 2004

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Jon M. Loney, Manager  
NEPA Administration  
Environmental Policy and Planning  
Tennessee Valley Authority

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Date Signed

**Attachments**

Decision Document for U.S. Coal, Inc, Deep Mine No. 11, Campbell and Scott Counties, Tennessee, OSM Application No. TN-014, July 13, 2004, including the SMCRA Permit, the Findings, a Cumulative Hydrologic Impact Assessments (CHIA) and the April 26, 2004, CHIA Update, and NEPA Compliance documents.

Letter dated January 8, 2002, from Lee A. Barclay (FWS) to Tim K. Slone (IRTEC) asking the applicant to determine the potential for impacts to Indiana bats.

Letter dated February 28, 2002, from Lee A. Barclay (FWS) to Bill Ferrell, (IRTEC) stating that based on field data provided by IRTEC, FWS believes that mining as proposed will not adversely impact the Indiana bat.

Letter dated April 22, 2002, from Lee A. Barkley (FWS) to Mary Angelyn Holmes (OSM) stating that the requirements of the Endangered Species Act have been fulfilled.

Letter dated July 18, 2002, from Lee A. Barclay (FWS) to Mary Angelyn Holmes (OSM) stating that the potential for adverse impacts to the blackside dace have been adequately addressed.

Letter dated December 6, 2001, from Herbert Harper (TN DSHPO) to Tim K. Slone (IRTEC) stating that no NRHP listed or eligible properties would be affected by the proposed project.



# United States Department of the Interior

## OFFICE OF SURFACE MINING

Reclamation and Enforcement  
530 Gay St., S.W., Suite 500  
Knoxville, TN 37902

JUL 13 2004

Mr. William M. Bale, President  
U.S. Coal, Inc.  
130 Coal Street  
Huntsville, Tennessee 37756

Subject: U.S. Coal, Inc.  
Deep Mine No. 11  
OSM Permit No. TN-014

Dear Mr. Bale:

We are pleased to present you with the subject permit and approved application to conduct surface coal mining and reclamation operations. A performance bond in the amount of \$74,000.00 has been approved.

Surface mining and reclamation authorized by this permit must be accomplished in accordance with the contents of the approved application, the provisions of the Surface Mining Control and Reclamation Act of 1977 (P.L. 95-87), and the regulations for the Federal Program for Tennessee. Please note the Section 13 condition that requires additional information to be submitted to the regulatory authority if a cessation order is issued. Transfer, assignment, or sale of these permit rights may not be completed without the approval of the Office of Surface Mining.

You are advised that you must also comply with NPDES permitting requirements administered and enforced by the Tennessee Department of Environment and Conservation. We were informed by Mr. Michael Robbins, Tennessee Department of Environment and Conservation, Division of Water Pollution Control, on May 5, 2004, that the pending NPDES Permit No. TN 0079120 can be approved upon successful completion of the public notice comment period.

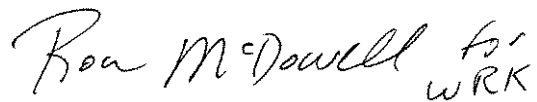
Thirty days after permit issuance, you must pick up the application on file for public review in the Courthouse or it will be discarded.

Mr. William M. Bale

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You may contact Doug Siddell at (865) 545-4103, extension 173, if you have any questions.

Sincerely,

A handwritten signature in cursive script that reads "Ron McDowell" followed by "for" and "WRK" in a smaller, more stylized font.

Wilfred R. Klimas, Acting Director  
Knoxville Field Office

Enclosures

cc: Mr. Tim Slone, P.E.  
IRTEC  
P.O. Box 306  
Caryville, Tennessee 37714

TN WPC, w/enclosures  
Inspection Group, w/enclosures

Ms. Ruth Horton  
TVA, w/enclosures

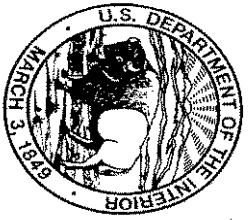


DECISION DOCUMENT  
FOR  
U.S. Coal, Inc.  
Deep Mine No. 11  
CAMPBELL and SCOTT COUNTY, TENNESSEE  
OSM APPLICATION NO. TN-014

TABLE OF CONTENTS

SMCRA Permit.....	I
Findings.....	II
Cumulative Hydrologic Impact Assessment.....	III
NEPA Compliance Documents.....	IV

OFFICE OF SURFACE MINING  
TECHNICAL GROUP  
KNOXVILLE FIELD OFFICE



**The United States Department of the Interior**  
**Office of Surface Mining**  
**Under The**  
**Federal Program For Tennessee**  
**Hereby Grants This**  
**Surface Coal Mining And Reclamation Permit**

To The

U.S. Coal, Inc.

For The

(Company Name)

Deep Mine No. 11

At

(Mine Name)

Latitude: 36° 22' 05" N.

Longitude: 84° 19' 04" W.

County

Campbell and Scott

Permit No.

TN-014

(Location)

Permit Acreage

35.7

Effective Date

July 13, 2004

Operations Type

Underground

Expiration Date

July 12, 2009

Conditions / Provisions: None

Signed

*Richard Moroney*  
Knoxville Field Office

Date

7-13-04

PERMIT NO. TN-014

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
OFFICE OF SURFACE MINING

This permit is issued for the United States of America by the Office of Surface Mining (OSM) to:

U.S. Coal, Inc.  
130 Coal Street  
Huntsville, Tennessee 37756

for the surface mining and reclamation operation:

Deep Mine No. 11  
Campbell and Scott Counties, Tennessee  
Latitude: 36°22'05" N. Longitude: 84°19'04" W.

This permit for a 35.7-acre area becomes effective on July 13, 2004, and expires on July 12, 2009, for a permit term of 5 years. A performance bond in the amount of \$74,000 has been approved. The bond, made payable to the "United States or the State of Tennessee," is filed with the Knoxville Field Office of OSM.

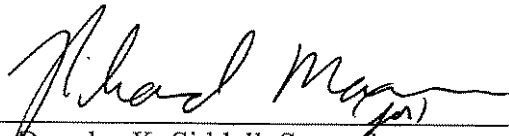
- Sec. 1      STATUTES AND REGULATIONS - This permit is issued pursuant to the Surface Mining Control and Reclamation Act of 1977, 30 U.S.C. 1201 et seq., hereafter referred to as the Act, and the Federal Program for Tennessee (30 CFR 942). This permit is also subject to all regulations of the Secretary of the Interior that are now in force or, except as expressly limited therein, may hereafter be in force and applicable and all such regulations are made a part hereof.
- Sec. 2      The permittee is authorized to conduct coal mining and reclamation operations only as described above and in detail in the approved permit application for the operation described above, subject to any conditions of the approved permit application and all other applicable laws and regulations.
- Sec. 3      This permit becomes effective on the date the permit is signed, except that this permit will terminate if the permittee has not begun the coal mining and reclamation operation covered herein within 3 years of the date of permit issuance.
- Sec. 4      The permit rights may not be transferred, assigned, or sold without the approval of the Regulatory Authority. Request for transfer, assignment, or sale of permit rights must be done in accordance with 30 CFR 774.17.

- Sec. 5 The permittee shall allow the authorized representative of the Secretary, including but not limited to inspectors and fee compliance officers, without advance notice or a search warrant, upon presentation of appropriate credentials, and without delay to:
- a. Have the rights of entry provided for in 30 CFR 842.13; and
  - b. Be accompanied by private persons for the purpose of conducting an inspection in accordance with 30 CFR 842.12 when the inspection is in response to an alleged violation reported by the private person.
- Sec. 6 The permittee shall minimize any adverse impacts to the environment or public health and safety resulting from noncompliance with any term or condition of this permit, including but not limited to:
- a. Accelerated monitoring to determine the nature and extent of noncompliance and the results of the noncompliance;
  - b. Immediate implementation of measures necessary to comply; and
  - c. Warning, as soon as possible after learning of such noncompliance, any person whose health and safety is in imminent danger due to the noncompliance.
- Sec. 7 The permittee shall conduct the operation in accordance with the terms of the permit to prevent significant imminent environmental harm to land, air, or water resources and adverse effects to the public health or safety.
- Sec. 8 The operator shall pay all reclamation fees required by 30 CFR Chapter VII, Subchapter R, for coal produced under this permit.
- Sec. 9 An application for renewal must be filed with the Regulatory Authority at least 120 days before expiration of the existing permit. Otherwise, the permit will expire at the end of the current term.
- Sec. 10 If, during the course of the mining operation, previously unidentified cultural resources are discovered, the permittee shall ensure that the site(s) is not disturbed and shall notify the Regulatory Authority. The Regulatory Authority, after coordination with the Tennessee State Historic Preservation Officer, shall inform the permittee of necessary actions required.
- Sec. 11 The permittee shall comply with the provisions of the Clean Water Act [33 U.S.C. 1251 et seq.] and the Clean Air Act [42 U.S.C. 7401 et seq.].

- Sec. 12      The permittee shall comply with the terms and conditions of the permit, all applicable performance standards of the Act, and the requirements of the Federal Program for Tennessee.
- Sec. 13      If a cessation order is issued under 30 CFR 843.11 for the operation conducted under this permit, the permittee shall submit to the Regulatory Authority all changes needed to update the information requirements of 778.11(c), current to the date the cessation order was issued.
- (1) This information must be provided, in writing, to the Regulatory Authority within 30 days after the cessation order is issued.
- (2) If a stay of the cessation order is granted and remains in effect, this requirement is nullified.
- (3) If there has been no change in the information submitted under 778.11(c), the permittee must submit a written statement to that effect.
- (4) These regulations apply to the Tennessee Federal Program or the State equivalent.
- Sec. 14      This permit will be suspended and/or revoked if the permittee fails to resolve to the satisfaction of OSM any nonrespondent quarters reportable on OSM-1 or OSM-1A (Coal Production and Reclamation Fee Report) due prior to permit issuance and/or to pay all monies found to be due and owing for those nonrespondent quarters for the permittee or any operations owned or controlled by the permittee or any operations owned or controlled by the owners or controllers of the permittee.
- Sec. 15      The permittee shall provide a copy of 30 CFR Subchapter P, Part 865 (Protection of Employees), to all current employees and to all new employees at the time of their hiring, as required by 30 CFR 865.11(b).
- Sec. 16      Waiver(s) - In accordance with 30 CFR 784.22(d), the permittee has been granted a waiver of the requirements for testing the engineering properties of clays or soft rock in the roof and floor strata. In accordance with 30 CFR 784.14(h), the permittee has been granted a waiver of the requirements for ground water monitoring.
- Sec. 17      Special Conditions: None
- Sec. 18      Provisions: None
- Sec. 19      Appeals - The permittee shall have the right to appeal:

- a. Under 30 CFR 775, any actions or decisions of any official of OSM, within 30 days, by contacting the U.S. Department of the Interior, Office of Hearing and Appeals, 801 North Quincy Street, MS-300QC, Arlington, Virginia 22203; or
- b. Under applicable regulations, any action or decision of any other official of the Department of the Interior arising in connection with this permit.

THE UNITED STATES OF AMERICA

By:   
Douglas K. Siddell, Supervisor  
Technical Group  
Knoxville Field Office

7-13-04

Date

## FINDINGS

U.S. Coal, Inc.  
Deep Mine No. 11  
OSM Permit No. TN-014

U.S. Coal's proposed Deep Mine No. 11 is located on Adkins Mountain approximately 2.4 miles west of the Turley community in Campbell and Scott County, Tennessee. The permit area is in the New River watershed at approximately the 2320 ft. elevation. The mine site proper is drained locally by Simpson Branch, a tributary of Straight Fork. The vast majority of the permitted haul road is drained by Roach Creek and Jenny Creek, tributaries of Montgomery Fork. U.S. Coal is proposing to disturb 34.46 acres of the 35.7-acre permit area during the 7.3-year life of the operation and anticipates recovering 2,600,000 tons of coal. The approved postmining land use will be fish and wildlife habitat and recreation.

The Office of Surface Mining (OSM) has reviewed and analyzed the application, incorporated documents, public and interagency comments, and the environmental assessment. This document summarizes the basis upon which OSM makes the findings required under 30 CFR 773.15 prior to the approval of any application submitted under the Federal Program for Tennessee, analyzes information from the application, addresses issues as needed to provide a brief background for OSM's findings, and presents the findings.

The public comment period for this site began March 21, 2002, and ended May 18, 2002. One comment was received during the comment period and one comment was received from the surface owner of the property proposed to be mined shortly after the close of the comment period.

1. The 510(c) Compliance Findings, dated July 9, 2004, indicated that no surface coal mining and reclamation operation owned or controlled by the applicant is in violation of the Surface Mining Control and Reclamation Act of 1977 (the Act); or in violation of any other Federal law, rule, or regulation; or any State law, rule, or regulation pertaining to air or water environmental protection. The Applicant/Violator System's (AVS's) recommendation on July 9, 2004, was to issue the permit. [Permit Item No. 10a-12]
2. The 510(c) Compliance Findings, dated July 9, 2004, indicated that the applicant neither controls nor has controlled mining operations with a demonstrated pattern of willful violations of the Act. [Permit Item No. 13-15]
3. The application was submitted to OSM on March 6, 2002, and has been reviewed by a team of OSM specialists trained in the disciplines of engineering, geology, hydrology, biology, and reclamation. The application was determined administratively complete on June 4, 2003. Technical deficiencies were identified through a comprehensive technical review.

A site visit was conducted on April 24, 2002. Present during the site visit were representatives of the applicant, the applicant's consultant, the Tennessee Division of Water Pollution Control, the Tennessee Wildlife Resources Agency (surface owner), the U.S. Fish and Wildlife Service, and OSM.

Dates of letters citing deficiencies in the proposed operation and reclamation plan and dates responses were received for the respective deficiency letters are listed in Table 1.

**TABLE 1**  
**Dates of Technical Review Deficiency Letters and Responses**

<b>Technical Review No.</b>	<b>Date OSM Sent Deficiency Letter</b>	<b>Date OSM Received Response From Applicant</b>
1	5/2/02	6/21/02
2	7/12/02	8/30/02
3	10/23/02	12/03/02
4	1/03/03	5/30/03

Since the application has been modified to address all deficiencies, OSM determined the application to be complete and accurate on June 9, 2003. The applicant has complied with all the requirements of the Act and the Federal Program for Tennessee (30 CFR Part 942). [Entire Application]

4. Over the 5-year anticipated life of this mining and reclamation operation, approximately 34.46 acres will be subject to surface disturbance. Surface disturbance will result from mining, improvement of roads, pond construction, spoil/topsoil substitute storage, and disposal of underground mine development waste. Backfilling, grading, and revegetation operations will employ acceptable engineering, hydrologic, and agronomic practices, and will be completed in accordance with regulatory performance standards. Measures have been included to control sediment. The proposed postmining land use is fish and wildlife habitat and recreation. OSM has found that the applicant has demonstrated that reclamation as required by the Act and the Federal Program can be accomplished under the approved reclamation plan. [Entire Application]
5. The Deputy State Historic Preservation Officer stated in a letter dated December 6, 2001, that the proposed operation will have no effect on cultural, historic, or archeological resources. OSM has confirmed that the permit area is:
  - (a) Not on any lands within the boundaries of the National Park System, the National Wildlife Refuge System, the National System of Trails, the National



Wilderness Preservation System, the Wild and Scenic Rivers System including designated study rivers, or National Recreation Areas; [Permit Item No. 24B(1-6)]

- (b) Not on any Federal lands within the boundaries of any national forest; [Permit Item No. 24B(7)]
- (c) Not on any lands where mining will adversely affect any publicly-owned parks or any places included in the National Register of Historic Places; [Permit Item No. 24B(12)]
- (d) Not within 300 feet of any public building, school, church, community or institutional building; [Permit Item 24B(10)]
- (e) Not within 100 feet of a cemetery; [Permit Item No. 24B(11)]
- (f) Not within an area designated unsuitable for surface coal mining operations; [Permit Item No. 24A]
- (g) Not within an area under study for designating lands unsuitable for surface coal mining operations; [Permit Item No. 24A]
- (h) Not within 100 feet of the outside right-of-way of a public road [Permit Item No. 24B(8) and C(1)];
- (i) Not within 300 feet of an occupied dwelling [Permit Item No. 24B(9) and C(2)]; and
- (j) Within 100 feet of a perennial or intermittent stream. In accordance with 30 CFR, Section 816.57(a), OSM finds that the proposed surface mining activities will not cause or contribute to the violation of applicable State or Federal water quality standards, and will not adversely affect the water quantity and quality or other environmental resources of the stream. No stream channel diversion is proposed in association with this permit. As a result, OSM authorizes surface mining activities within 100 feet of the perennial or intermittent stream. [Permit Item No. 52D]

6. The application identifies the conveyance upon which the applicant bases its legal right to enter and begin surface coal mining and reclamation operations in the permit area. The conveyance is identified as a lease from the Tennessee Valley Authority to U.S. Coal, Inc., dated January 1, 2002. The lease grants the applicant the right of ingress and egress and the right to construct the necessary support facilities for the purpose of conducting underground mining on all seams of coal above and including the Red Ash seam. The applicant also states that a lease dated September 12, 2002 between U. S. Coal, Inc., and Cumberland Timber Company, LLC, includes an

easement to transport mined coal across Cumberland's property and to mine the property by underground mining methods. U.S. Coal has stated that their right to mine is not the subject of any current or pending litigation. [Permit Item No. 22]

Although private surface and mineral estates have been severed, the requirements of 30 CFR 778.15(b) do not apply as extraction of coal by surface mining methods is not proposed. [Permit Item No. 23]

7. On April 26, 2004, OSM completed the cumulative hydrologic impact assessment (CHIA) required by 30 CFR 784.14(f) of the Federal Program for Tennessee. CHIA findings and other evaluations made by OSM indicate that approval of the proposed operation will produce little or no adverse change to the prevailing hydrologic balance of the area. OSM has determined that the proposed operation has been designed to prevent material damage to the hydrologic balance outside the permit area (CIA Area 8, Subarea TS-6 and TS-6A). OSM predicts that the water quality of the receiving streams will remain within acceptable limits for their particular stream-use classification. [Permit Item No. 40-44]
8. Existing structures to be used by this operation include a haul road. The haul road will require some modification. OSM has determined that the proposal to permit these existing structures meets the requirements of 30 CFR 784.12 and 30 CFR 701.11(e). [Permit Item No. 51]
9. The 510(c) Compliance Findings, dated July 9, 2004, indicated that the applicant and all surface mining and reclamation operations owned or controlled by the applicant have paid all reclamation fees from previous and existing operations [30 CFR 773.15(c)(7)]. The AVS recommendation on July 9, 2004, was to issue the permit. [Permit Item No. 8b]
10. The requirements of 30 CFR 785.25 apply as the proposed operation includes plans for remining. OSM has determined that the applicant has complied with the applicable requirements of 30 CFR 785.25 and lands eligible for remining are present within the proposed permit area. [Permit Item No. 70-76]
11. OSM has determined that the requirements for approval of a long-term intensive agricultural postmining land use do not apply to this operation. Prime farmland does not exist within the permit area. [Permit Item No. 33]
12. In a March 19, 2002, correspondence, OSM provided the Tennessee Department of Environment and Conservation's Division of Natural Heritage (DNH) an opportunity to comment on the proposed application and any issues or concerns they might have. In an April 3, 2002 response, DNH indicated that the Cerulean Warbler, a neo-tropical migratory bird species identified by the State of Tennessee as "Deemed in Need of Management" and submitted to the U. S. Fish and Wildlife Service for listing

consideration under the Endangered Species Act, has been identified within one mile of the proposed mine site.


In a June 10, 2002, correspondence to OSM, the Tennessee Wildlife Resources Agency (TWRA) expressed a number of comments and concerns related to the proposed project. One of these comments concerned TWRA's recent identification of the blackside dace, a fish species listed as endangered by both the state and federal governments, in Straight Fork and two of its tributaries approximately 3 miles downstream from the proposed mine site. In developing the proposed project, the applicant has addressed many of TWRA's concerns including those related to the blackside dace.

In a letter dated January 8, 2002, the U.S. Fish and Wildlife Service (FWS) indicated that their records showed Federally listed threatened or endangered species (Indiana bat) occurring within approximately 6 miles of the project. The FWS requested that potential impacts to the species be evaluated. In the winter of 2002, the applicant's consultant conducted an evaluation of potential bat habitat on the proposed site. No potential habitat was identified and in a correspondence to OSM dated April 22, 2002, the FWS indicated that they believed the requirements of the Endangered Species Act had been fulfilled. After the discovery of the blackside dace in the vicinity of the proposed mine site, OSM reinitiated informal consultation with FWS. In a July 18, 2002, correspondence, FWS concluded that the proposed water quality protection measures should provide adequate protections for the dace. OSM concluded that the operation, as proposed, should have no effect on any threatened or endangered species, or result in destruction or adverse modification of critical habitats. [Permit Item No. 34]

13. Waiver(s) - In accordance with 30 CFR 784.22(d), the permittee has been granted a waiver of the requirements for testing the engineering properties of clays or soft rock in the roof and floor strata and the requirements to conduct chemical analysis of coal-bearing strata and coal. In accordance with 30 CFR 784.14(h), the permittee has been granted a waiver of the requirements for ground water monitoring. Approval of these waivers is based upon the fact that other information having equal value or effect is available to the regulatory authority. This includes a general knowledge of the permit area and information from past mining in the vicinity of this proposed mine. [Permit Item No. 39]

14. Neither the site visit nor the application indicated the presence of private burial grounds. OSM has concluded that none would be affected. [Permit Item No. 24B(11)]

All required written findings applicable to this operation/application have been made.

By:   
Douglas K. Siddell, Supervisor  
Technical Group  
Knoxville Field Office

7-13-04  
Date

## Cumulative Hydrologic Impact Assessment

Cumulative Impact area No. 8, Trend Station Subarea No. 6 & ~~8A~~ <sup>8B</sup>

OSM Permit #TN-014, Date: 5/16/03

U.S. Coal, Inc., Deep Mine No. 11

This Cumulative Hydrologic Impact Assessment (CHIA) dated May 16, 2003 meets the requirements of 30 CFR 942.780.21(g). The proposed operation is an underground mine located at the site of an existing abandoned strip mine. The operator proposes to disturb about 4 acres of a pre-existing strip mine bench to facilitate underground mine entries. As such, there will be little if any disturbance to natural ground. The entire site was previously contour mined prior to SMCRA. The total permitted area is 35.7 acres but the majority of this consists of a pre-existing haul road. The coal seam to be mined is the Red Ash Seam, which has been mined extensively in the adjacent area.

The Cumulative Impact Area (CIA) was determined based on a consideration of the magnitude of the impacts expected from the operation and on the hydrologic balance of the area. The proposed operation drains to Simpson's Branch, which feeds Straight Fork. Straight Fork then enters New River, a tributary to the Cumberland River. The haul road drains to Montgomery Fork, a tributary to New River.

Groundwater in the area consists of the stress relief fracture system along the hillside below the disturbed area. Simpson Branch is a narrow, steep, "V" shaped valley that has been extensively mined prior to SMCRA. There are large piles of coal refuse and spoil that have buried the natural stream channel in places. Therefore, it is not possible to determine the natural conditions of the creek and the amount of groundwater base flow it receives.



GENERAL LOCATION MAP

FILE DWG: USC-M11-GLM

U.S. COAL, INC.  
130 COAL STREET  
HUNTSVILLE, TN 37756

SCALE: 1"=2000'  
BLOCK & PIONEER QUADS.

CAMPBELL COUNTY  
LAT: 36°22'04"  
LONG: 84°19'01"

DEEP MINE NO. 11

MAP PREPARED BY:  
JDM/TC

▲ DISCHARGE MONITORING POINT

The surface disturbance for this site is contained within CIA # 10, Subarea No. 6A. The following operations exist in the Cumulative Impact Area (CIA):

ANTICIPATED MINING IN THE SURFACE WATER CHIA AREA

<u>OSM No.</u>	<u>APPLICANT</u>	<u>MINE NAME</u>	<u>TYPE</u>	<u>DISTURBANCE</u>	<u>STATUS</u>
TN-012	Gatliff Coal Co.	Braden Mt. #16	Surface	@100	Inactive
TN-014	U.S. Coal Inc.	Deep Mine #11	Underground	4.1	Proposed

As the list above shows, there is currently no mining occurring in the watershed. Only Braden Mountain (TN-012) is approved for mining a small portion of the headwaters of Straight Fork. However, the Braden Mountain project was never started, and may never be mined. This means there is little chance of any cumulative impacts from this small underground operation. The information in this CHIA is based in part on an OSM CHIA dated June 7, 1999 (Subarea 6A – Braden Mountain, TN-012) herein incorporated by reference.

## WAIVERS

The applicant has not requested any waivers for geologic information. A waiver from ground water monitoring has been granted by OSM. The reason is that this operation will only disturb a few acres of an existing strip mine bench. The underground workings are not predicted to dewater any significant aquifers, and limited coal extraction will prevent subsidence. The only groundwater discharge nearby is water coming from an old adit. Baseline data on the adit water indicates it is not acidic or high in metals. There were no water users within a half a mile of the permit area. The areas adjacent to, and below this operation contain extensive abandoned mines with exposed coal refuse. The discharge from this operation will flow down hill and eventually commingle with these old strip mines. This type of mining, especially on an existing abandoned mine bench, is unlikely to disturb the hydrologic balance. Therefore the waiver to monitor groundwater has been granted.

## STREAM BUFFER ZONE

The mine is located on an existing strip bench on the side of a steep mountain. There are several small stream channels that have been disturbed by pre-law mining. The underground portal area will not disturb any intermittent or perennial stream. However, the haul road does cross the tributary creeks of Montgomery Creek. The operator contacted the U.S. Fish and Wildlife Service, the Tennessee Wildlife Resources Agency, and the Tennessee Division of Water Pollution. These agencies required changes in the haul road drainage designs to ensure the streams would be protected. The State also required an aquatic resource alteration plan (ARAP). The existing haul road intersects portions of an old strip mine that has some acid mine drainage. The operator modified his plans to avoid these areas and to reduce the amount of sediment coming off the road. Therefore a stream buffer variance is hereby approved for this operation.

## PHC and HRP CONSIDERATIONS

The Hydrologic Reclamation Plan (HRP) ensures that there will be little or no Probable Hydrologic Consequences (PHC) from mining. The application proposes very little surface disturbance at the site. Only a small amount of earth will be disturbed on the existing abandoned mine bench; enough to expose the coal seam for construction of the entries. Since the area to be mined is already disturbed, the proposed operation will significantly reduce the amount of surface erosion from the site and result in fewer pollutants to the local hydrologic area. This proposed operation would provide sediment control to many portions of the site, using a number of sediment ponds and sumps. Sediment loads will be reduced and the stream quality will be improved by this action.



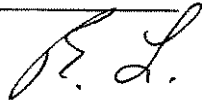
There will be no acid mine drainage (AMD) created by this small operation. The coal seam to be mined has not produced AMD at any adjacent operations. As a result, there will be little increase in Total Dissolved Solids, Sulfate, or alkalinity. With neutral pH, any iron or manganese in the water will precipitate out. Overriding this is the fact that the operation itself will produce very little water, since the hillside will not be removed. Mining would not result in any detectible changes in downstream water quality or quantity, or affect any water uses or endangered species. The State of Tennessee is requiring an Aquatic Resource Alteration Plan (ARAP) for the haul road portion of this permit.

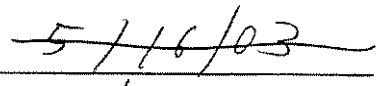
As part of this CHIA, OSM reviewed the available surface and groundwater data for the sites in the basin draining to Trend Station Subarea 6A. Recent trend station data for Straight Fork shows it continues to meet State water use classifications. The pH is neutral, dissolved solids are low, and there is no acidity.

#### CONCLUSION

The disturbance and subsequent reclamation of this existing mine bench by the proposed operator will improve the water quality leaving the site. Based on the information contained herein, the application, and OSM's CHIA model: OSM finds that the operation has been designed to prevent material damage outside the permit area.

  
Robert Liddle



  
~~5/16/03~~  
4/26/04 updated.

Cumulative Hydrologic Impact Assessment – UPDATE  
US Coal Incorporated, Deep Mine #11

Updated 4/26/2004

OSM found this permit application Technically Adequate in May of 2003, and a Cumulative Hydrologic Impact Assessment (CHIA) was completed on May 16, 2003. However, the company never submitted the performance bond, so the operation was put in a deferred status. Recently the applicant indicated they want to begin mining operations, so OSM has reviewed the application again to determine what updates need to be made. As part of this review, OSM is evaluating the CHIA to determine what updates are needed. This document is an addendum to the original CHIA and documents the evaluation of the CHIA.

The operation is a small underground operation that will face-up along an existing abandoned highwall. Subsequent reclamation of the face-up after mining will result in a condition much better than the existing site. This is because erosion from the site will be minimized by the re-grading, backfilling of the dangerous highwall, and re-vegetation of the site. The sediment control measures implemented during and after mining will reduce the amount of sediment leaving the site, therefore reduce the impacts to adjacent streams. Likewise, the operator will utilize an existing abandoned haul road for coal transport. The existing road has no sediment control and is bounded by several old abandoned mines. As part of this permit application, OSM is requiring the applicant to reconstruct this haul road to meet the strict drainage and sediment control requirements of SMCRA. Drainage from the road will be collected by road-side ditches and routed to sumps to settle out the sediment. The water will then be discharged down stable slopes so as not to cause excessive gullies. The road will be surfaced with durable rock to reduce the mud that now washes off the road during precipitation events. A short segment of the road will be re-routed to avoid an unstable portion of the existing road. All of these efforts will greatly improve the existing conditions at the site and result in a reduction of sedimentation to the adjacent streams. This should result in an improvement in the habitat quality of the stream.

The coal seam the applicant will be mining is non-toxic and non-acid forming as evidenced by the existing water quality at adjacent abandoned mines in the same seam. Therefore there will not be an increase in acidity, iron, or manganese discharged from the site. Reclamation of the site and subsequent re-vegetation should reduce the peak discharge from the site and therefore, reduce the potential for flooding. After the mining is completed, water will slowly flood the underground workings, cutting off the oxygen supply to the workings. The water quality is expected to be good as evidenced by an adjacent discharge from the same seam. There will be no gravity drainage from the underground mines after reclamation.

The mine face-up area drains to Simpson Branch, which then flows into Straight Fork, a tributary to Buffalo Creek. The haul road will drain to tributaries of the Montgomery creek. Both Buffalo creek and Montgomery creek are tributaries to New River, a major river in the area. New river eventually flows into the Big South Fork National River and Recreation Area. Eventually New

River forms the South Fork of the Cumberland River and is a major drainage basin in Kentucky. The Cumberland River eventually combines with the Tennessee River at Paducah, Kentucky and immediately combines with the Ohio River before entering the Mississippi River just west of Paducah. The face-up of this operation is over 10 miles from the New River and over 20 miles from the Big South Fork Recreation area. The haul road of this operation is 1 mile from the New River and 21 miles from the Big South Fork Recreation area.

Since the Probable Hydrologic Consequences (PHC) of this operation will be an improvement to water quality leaving the site, no cumulative impacts from other operations will result. Mining and subsequent reclamation of these abandoned areas will help restore the adjacent receiving streams closer to their natural state. This will result in no impacts to the New River or the Big South Fork recreation area.



Robert Liddle

Amended on 4/26/2004

U.S. DEPARTMENT OF THE INTERIOR  
OFFICE OF SURFACE MINING  
FINDING OF NO SIGNIFICANT IMPACT

U.S. Coal, Inc.  
Deep Mine No. 11  
OSM Permit No. TN-014

A. Introduction

The Office of Surface Mining (OSM) proposes to issue a permit to U.S. Coal, Inc., to conduct a surface coal mining and reclamation operation in accordance with the approved operation and reclamation plan which has been determined by OSM to be in compliance with the Surface Mining Control and Reclamation Act (SMCRA). This determination was made after a thorough technical review of the applicant's proposal, as contained in the permit application, by a multi-disciplinary team of professionals in geology, hydrology, engineering, and biology.

The process of permit review and issuance is necessary in order to allow the applicant to recover the coal resource with minimal environmental impacts. This is accomplished by requiring compliance with the National Environmental Policy Act (NEPA) and SMCRA.

The three decision alternatives considered were: no action, permit approval, and permit disapproval. The "no action" alternative was eliminated because SMCRA and OSM regulations require that an action to approve or disapprove the permit application must be taken. Permit approval is the preferred alternative.

B. Statement of Environmental Significance of the Proposed Decision

OSM has determined that this proposed decision would not have a major impact on the quality of the human environment. Therefore, an environmental impact statement pursuant to Section 102(2)(c) of NEPA is not required. This finding of no significant impact is based on the enclosed OSM environmental assessment, which identifies and discusses the environmental impacts resulting from the proposed decision and reasons stated below.

C. Reason

Impacts to environmental and socioeconomic resources resulting from the proposed surface coal mining and reclamation operations are predicted to vary from minor to moderate. These impacts are addressed in the enclosed environmental assessment. Mitigating measures have been incorporated in the approved operation and reclamation plan that will support OSM's finding of no major impacts from the proposed surface coal mining and reclamation operation.

Authorized Official

Title

Date

Prepared by:

Jeff Cohen Biological Scientist 7/13/04

Approved by:

Richard A. Man (acting supervisor) 7-13-04

U.S. DEPARTMENT OF THE INTERIOR  
OFFICE OF SURFACE MINING  
ENVIRONMENTAL ASSESSMENT

U.S. Coal, Inc.  
Deep Mine No. 11  
OSM Permit No. TN-014

A. Proposed Decision

The Office of Surface Mining (OSM) proposes to approve the permit application and issue a permit for the surface coal mining and reclamation operation proposed by U.S. Coal, Inc., (U.S. Coal). TVA proposes to lease mineral rights on the Koppers Coal Reserve to U.S. Coal for underground mining, subject to all terms and conditions include in or incorporated by reference in the lessor's deed.

B. Need for the Proposed Decision

Pursuant to the Surface Mining Control and Reclamation Act (SMCRA), U.S. Coal must obtain a permit from OSM to conduct the proposed surface coal mining and reclamation operation. In accordance with the National Environmental Policy Act (NEPA), OSM has, in consultation and cooperation with the Tennessee Valley Authority (TVA), developed this environmental compliance document to assist in the agency decisionmaking process. The proposed decision of permit issuance will allow U.S. Coal to conduct the surface coal mining and reclamation operation in accordance with SMCRA while ensuring that no major environmental impacts occur and impacts are minimized to the extent practicable. TVA must develop a NEPA compliance document on the proposed action to signify to U.S. Coal the completion of all environmental and cultural resources reviews by TVA, as provided for in the lease.

C. Decision Alternatives

Alternative 1: Permit Application Approval - OSM may issue the permit upon finding that the proposed operation will meet the requirements of SMCRA and the Federal Program for Tennessee.

Alternative 2: Permit Application Disapproval - OSM may disapprove the permit application upon finding that the proposed operation will not meet the requirements of SMCRA and the Federal Program for Tennessee.

Alternative 3: No Action - The Federal Program for Tennessee requires that OSM approve or disapprove a permit application for surface coal mining and reclamation operations. Accordingly, this alternative will not be considered further.

#### D. Applicant's Proposal

The location of the proposed Deep Mine No. 11 is on Adkins Mountain approximately 2.4 miles west of the Turley community in Campbell and Scott County, Tennessee. The mine site is in the New River watershed at approximately 2320 ft. elevation and is drained locally by Simpson Branch, a tributary of Straight Fork. The vast majority of the permitted haul road is drained by Roach Creek and Jenny Creek, tributaries of Montgomery Fork. U.S. Coal proposes to conduct underground mining on the Red Ash coal seam. U.S. Coal will utilize bulldozers, front-end loaders, and trucks for mining and reclamation operations within the proposed permit area. U.S. Coal is proposing to disturb 34.46 acres of the 35.7-acre permit area during the 7.3-year life of the operation. The total affected acreage, including the surface area above the proposed underground mine workings, is 1,135 acres. The mine is expected to have an average annual production of approximately 360,000 tons and life-of-mine production of approximately 2,600,000 tons.

The proposed permit area was previously surface mined during the 1960's and early 1970's. Highwalls were left exposed over the majority of the area. The existing haul road to be permitted in this application was used to transport coal in the 1950's and under various permits throughout the 1960's and 1970's. The disturbed areas within the proposed permit area, with the exception of the haul road, will be reclaimed utilizing all reasonably available spoil. Insufficient spoil materials are present to eliminate the highwall. During reclamation, the exposed coal seam will be covered with a minimum of 5 ft. of spoil materials. After the backfilled areas are final graded, topsoil substitute materials will be revegetated with a seed mixture capable of producing a permanent, diverse, and effective ground cover. Shrubs will also be established. The approved postmining land use will be fish and wildlife habitat and recreation. The haul road will be retained as a permanent structure in accordance with the landowner's wishes.

#### E. Summary of Environmental Impacts

Initially, the mining operation will cause temporary or short term changes to environmental resources such as: (1) topography, (2) land use, (3) wildlife and its habitat, (4) air quality, (5) esthetics, and (6) hydrology. Short term socioeconomic impacts are anticipated as well. In addition to these temporary changes, some permanent or long term changes will occur during the course of the mining and reclamation operation such as: (1) additional alteration of the geologic strata, (2) increased infiltration rates through the backfilled material, and (3) postmining vegetative cover. Proper implementation of the proposed operation and reclamation plan is predicted to prevent or minimize adverse effects that may occur from the temporary and permanent changes.

## F. Description of the Existing Environment

The existing environmental resources within and adjacent to the proposed permit area are described in the permit application and OSM's environmental impact statement (OSM-EIS-18) for the Federal Program for Tennessee.

### 1. Topography, Geology, and Soils

The proposed permit area is located in the New River watershed and is drained locally by Simpson and Neal Branch, tributaries of Straight Fork and by Roach Creek and Jenny Creek, tributaries of Montgomery Fork. The area is in the Wartburg Basin Region of the Tennessee coalfields. The topography of the proposed permit and surrounding area is typical of the Wartburg Basin Region in that it is characterized by rugged, mountainous terrain with steep slopes and narrow valleys. The site has been previously contour mined leaving a partially exposed highwall. An existing haul road provides access to the Red Ash mine bench level.

Geologically, the proposed mine site is located in strata of the Redoak Mountain Formation. Alternating beds of shale, sandstone, and coal characterize this Pennsylvanian age rock formation. The Red Ash coal seam, the target coal, is found in the upper third of this formation and is overlain and underlain by shale units having thicknesses varying from a few feet to 45 feet. The dip is less than 0.5 degrees in a north to northeast direction. Coal seam thickness in the proposed permit area averages approximately 32 inches.

No ground water users were identified within the permit area. The closest ground water users are likely located near the confluence of Neals Branch and Straight Fork approximately 1.5 miles northwest of the proposed permit area. Any wells in this area would be at an elevation approximately 800 feet below the Red Ash coal seam. Ground water movement in the proposed permit and adjacent areas is anticipated to flow downward through fracture systems until reaching relatively impermeable shale units. Upon encountering these more impermeable shale units, the localized ground water movement would then be perpendicular to topographic contours until appearing at the surface as springs and seeps. Ground water discharging at a rate of less than 4 gpm from an abandoned underground mine portal located on the Red Ash seam approximately 600 feet southeast of the proposed underground works had water quality with pH varying from 6.4 - 7.1 and metals in the range of (Fe 0.41 - 11.3 mg/l and Mn 0.1 - 1.37 mg/l).

U.S. Coal, through a geologic sampling and analysis program, has determined potentially acid-producing material is present within the proposed permit area in the form of the Red Ash coal seam proper and the spoil materials on the Big Mary



seam, an old mine bench on which an estimated 400 ft. section of the previously existing haul road is located. U.S. Coal has developed a toxic material handling plan (TMHP) which includes hauling any toxic materials associated with the coal (e.g. sediment pond clean-out materials) to their permitted refuse disposal facility where disposal would occur in accordance with that approved plan and hauling the coal to the processing facility. Disturbance of spoil on the Big Mary bench associated with the haul road will be minimized as disturbance to the existing road in this location will be limited to raising the existing road by bedding with limestone surge stone. This plan should prevent material damage to the hydrologic balance outside the proposed permit area.

There are two soil series present within those portions of the proposed permit area subject to disturbance. The soils are identified as Bethesda soils and Muskingham-Gilpin soils. As essentially the entire permit area has been previously disturbed, the Bethesda soils or mine spoil make up the vast majority of the soils to be disturbed. Neither of the identified soil series is considered to be prime farmlands.

## 2. Vegetation, Land Use, and Esthetics

The vegetative cover type of the previously unmined areas surrounding the proposed permit area is mixed mesophytic forest. The forest canopy is mostly composed of various species of both red and white oaks, hickories, yellow poplar, red maple and yellow pine. The understory includes stands of laurel and rhododendron, particularly along the streams in the vicinity of the proposed mine site, sourwood, dogwood, oaks, hickories, and numerous shrubs and berry plants. Timbering operations have removed a majority of the mature saw timber leaving an uneven aged forest dominated by early saw and late pole size timber classes. The previously mined or disturbed portions of the proposed permit area are currently supporting a vegetative cover comprised of various herb and early successional woody species.

The proposed haul road already exists as an unpaved road. The road will require some limited improvement work in order to be used for hauling coal. Previous surface mining of the area has left an existing highwall and associated mine bench that will facilitate the development of the underground mine face-up area.

Tennessee Wildlife Resources Agency (TWRA), the surface owner of the proposed underground mine face-up area and a portion of the proposed haul road, acquired the property in October 1991. Although the proposed permit area is not subject to specific zoning restrictions or land use limitations, TWRA has developed a specific management plan for their land. Under this management plan, TWRA has actively managed the proposed permit and adjacent areas as a wildlife management area (Royal Blue Wildlife Management Area). The

remaining owner of properties associated with this proposed permit area, Cumberland Timber Company, LLC, owns that portion of the proposed haul road outside of the wildlife management area. TVA owns the coal within the area proposed to be mined and has leased it to U.S. Coal.

Cumberland Trail State Park, Tennessee's first linear state park, is located approximately 1.5 miles from the south end of the proposed haul road and approximately 4 miles from the proposed mine site proper. This park is comprised of a hiking trail and associated support facilities. When the trail is ultimately completed, it will extend from Chattanooga, TN, to Middlesboro, KY. At present, 14 segments of the trail totaling approximately 150 miles have been completed (Knoxville News Sentinel, 2004). Cove Lake State Park is located approximately 7 miles southeast of the proposed mine site. Big South Fork National River and Recreation Area (NRRA) is approximately 13.5 miles from the proposed mine site. Big South Fork NRRA is over 21 miles downstream from the site. Frozen Head State Park and Indian Mountain State Park are both over 16 miles from this proposed site. Cove Lake, Frozen Head, and Indian Mountain are each in different watersheds than is the proposed mine site. Big South Fork, Cove Lake, Frozen Head, and Indian Mountain are typical parks and recreation areas in that they are quite heavily used by the public for various recreational purposes such as sightseeing, camping, hiking, fishing, non-motorized boating, picnicking, walking, etc.

Local residents use the area for occasional recreation activities such as hunting, camping, hiking, off-road vehicle use, wildlife observation, horseback riding, mountain biking, etc. The closest known residential property is located approximately 1.5 miles northwest of the proposed permit area.

The esthetic qualities in the general area of the proposed mine site have been heavily impacted by past coal mining operations, most of which occurred during the 1960's and 1970's. Highwalls were left exposed at many of the sites and spoil materials were typically left unreclaimed or were revegetated with pine or black locust. Timbering operations, occasional post-SMCRA mining activities, utility lines, and the installation of roads associated with these land uses have also had some impact on the esthetics of this area. Additional disturbance-type activities such as logging have been somewhat limited in this area since TWRA acquired the property in 1991.

### 3. Hydrology

U.S. Coal 's proposed Deep Mine No. 11 is located in the New River watershed, Cumulative Impact Area (CIA) 8. Simpson Branch and Neal Branch, tributaries of Straight Fork, receive run-off from the underground mine site (Simpson Branch) and a short section of the haul road (Neal Branch). Montgomery Fork, a

tributary of New River, receives run-off from the vast majority of the permitted haul road via its Jenny Creek and Roach Creek tributaries. OSM has prepared a Cumulative Hydrologic Impact Assessment (CHIA) for these subwatersheds or trend stations on Montgomery Fork (TS-4) and Straight Fork (TS-6). The CHIA was developed for this proposed mining operation to consider the combined hydrologic impacts on both the ground water and surface water resources resulting from existing and anticipated mining operations. A detailed description of the existing environment, as it relates to both surface and ground water, is incorporated into the above CHIA and has been included in this Decision Document beginning on page III-1. Additional information describing the existing environment may also be found in the permit application (PHC and surface / ground water monitoring) and OSM's environmental impact statement for the Tennessee Federal Program (OSM-EIS-18).

#### 4. Fish and Wildlife Resources and Threatened or Endangered Species

Terrestrial wildlife within the proposed mine site and surrounding area consists primarily of upland forest species such as, but not limited to, white-tail deer, turkey, raccoon, bobcat, eastern gray squirrel, eastern cottontail rabbit, red and gray fox, opossum, striped skunk, ruffed grouse, bobwhite quail, and numerous small mammals, songbirds, amphibians, and reptiles. The diversity of the wildlife habitat within the proposed mine site and adjacent areas is limited somewhat because of the oak/hickory forest dominating the general area. However, this is offset to a great extent by the fact that the area has been set aside and managed for the development of wildlife populations

Recent studies by members of the "birding" community reportedly found that Royal Blue Wildlife Management Area (RBWMA) supports a relatively abundant population of neotropical songbirds (Rosenberg, 2000). Although currently given no legal protection status under the Endangered Species Act, many of the neotropical migrant songbird species such as the cerulean and golden-winged warblers are identified as species "in need of management" by the State of Tennessee and/or are species of concern to organizations such as "Partners in Flight". The U.S. Fish and Wildlife Service (FWS) was recently petitioned to consider listing the cerulean warbler as threatened. Many of these bird species are reportedly on the decline for reasons that may include deforestation in Central and South America, forest fragmentation in North America, and other forms of habitat loss.

Cerulean warblers are common summer residents in mesic hardwood forests of the Cumberland Plateau area. The species typically "occupies mixed age to mature stands, usually with open understory and scattered canopy gaps" (TVA, 2002). The type habitat alterations described above (surface mining in the 1960's and 1970's, logging prior to TWRA acquisition in 1991, and the construction of

roads, utility corridors, etc.) would be reasonably assumed to have adversely impacted the cerulean warbler in the proposed permit and adjacent areas by adversely affecting its preferred habitat. However, in spite of these past disturbances, the cerulean warbler reportedly remains in relatively abundant numbers in RBWMA and in the vicinity of the proposed mine site and haul road. The golden-winged warbler on the other hand, may have benefited from the very same habitat changes that likely adversely impacted the presence of the cerulean warbler. The golden-winged warbler “occupies old fields and revegetated surface mines with ground cover of grasses and forbs, clumps of shrubs, and scattered trees” (TVA, 2002), and as such, may exist in numbers in these previously disturbed areas that exceed areas where mature forest habitat is the prevailing vegetative cover.

In describing the wildlife resources, it is noteworthy that the RBWMA is one of two places in Tennessee where wildlife organizations are attempting to reestablish elk populations. There have been at least two recent releases of elk in RBWMA. Although the elk release site is an estimated 4.5 miles from the proposed permit area, given the range of this species, it is quite possible that elk could become a species of concern relevant to this proposed permit area.

Riparian areas, vegetated areas adjacent to bodies of water, are located within the proposed mine site and/or adjacent areas. These zones of integration, ecotones, enhance diversity by providing subtle change from one vegetative type to another. These ecotones support wildlife species from the distinct vegetative communities as well as adaptable species that tend to colonize such transitional zones.

Fishery resources in the immediate vicinity of the proposed mine site are likely to be very limited to non-existent as the steep topography and ephemeral nature of the surface flow make it unlikely a fish population could be sustained. However between 0.75 and 1 mile below the proposed mine site, stream gradients are much less and flow patterns are likely to be more conducive to sustaining at least a seasonal fishery resource. Fishery resources at locations closer to the proposed mine site are expected to be limited to non-game species typical of headwater habitats. These habitats are normally dominated by cyprinids (minnows) and percids (darters).

In June 2002, Tennessee Wildlife Resources Agency (TWRA) conducted stream surveys on Straight Fork, Jenny Creek, and Montgomery Fork. The approximate locations of the 2002 stream survey sites are as follows;

Straight Fork (TWRA Site 1) – 0.2 miles above confluence with Simpson Branch  
(note: discharge from proposed mine site will flow approximately  
1.1 miles down Simpson Branch before entering Straight Fork)  
Straight Fork (TWRA Site 2) – 0.4 miles above confluence with Simpson Branch  
Straight Fork (TWRA Site 5) – 2 miles below confluence with Simpson Branch

Montgomery Fork (TWRA Site 2) – 0.4 miles downstream of Roach Creek  
confluence

Jenny Creek Site – 0.2 miles upstream of confluence with Montgomery Fork

Given the locations of the above survey sampling sites, it is likely that all the sites exhibit at least intermittent flow patterns with the Montgomery Fork and Straight Fork Site 5 likely having perennial flows.

Existing fishery resources for these sites are described as follows:

Straight Fork Site 1 - The survey of this stream section identified no fish species. This lack of fish was believed to be due to the influence of low pH (4.5) water in this section of the stream. When evaluating benthic macroinvertebrates collected during the stream survey, this site received a bioclassification of “fair to good”.

Straight Fork Site 2 - The survey of this stream section identified a total of 1 fish species (creek chub). A total of 109 fish were collected during this survey. When evaluating benthic macroinvertebrates collected during the stream survey, this site received a bioclassification of “good”.

Straight Fork Site 5 - The survey of this stream section identified a total of 2 fish species including creek chubs and blackside dace, a species Federally-listed as threatened. A total of 50 blackside dace were identified in sampling associated with this site. Benthic macroinvertebrates were not collected during the stream survey of this site.

Using fish indexed scoring systems, Straight Fork was found to be in “very poor” condition.

Two other TWRA sample sites were surveyed on Straight Fork in June of 2002 but are not discussed in this EA as the above reported sites are those sites in the Straight Fork drainage that are in closest proximity to the proposed mine site. It should be noted that one of the two sites not discussed in this EA (Site 3 located approximately 1.25 miles downstream of above discussed Site 5) did report the identification of two blackside dace.

Montgomery Fork Site 2 - The survey of this stream section identified a total of 20 fish species including 5 game fish species. 7 darter species, including two state-listed species [Ashy darter (threatened) and emerald darter (in need of management)] were identified among the 20 species collected. Using a fish indexed scoring system, this section of Montgomery Fork was classified as “good”. When evaluating benthic macroinvertebrates collected during the stream survey, this site received a bioclassification of “fair to good”.

Jenny Creek – The survey of this stream section identified no fish species. This lack of fish was attributed by the TWRA survey team to the influence of low pH (5.5) water in this section of the stream. Benthic macroinvertebrates were not collected during stream survey of this site.

In an April 3, 2002, correspondence, the Tennessee Department of Environment and Conservation's Division of Natural Heritage (DNH) DNH responded to an OSM request for comments stating that the Departmental database indicated threatened or endangered species had been identified within a 1-mile radius of the proposed mine site within an approximate 15-mile downstream reach from the proposed site. The information provided by DNH indicated that the previously discussed cerulean warbler was identified within a one mile radius.

A search of the DNH web site ([http://www.state.tn.us/environment/nh/qq/tnqqeo\\_j.htm](http://www.state.tn.us/environment/nh/qq/tnqqeo_j.htm)) indicated that as per the April, 2004 updated database, 9 terrestrial species (Table 1) and 4 aquatic species (Table 2) occurrence records, including the species discussed above, were identified within an approximate quarter quad radius of the proposed mine site proper. The quarter quad radius roughly reflects a 3.5 to 4.5 mile radius from the proposed site.

**Table 1.**  
**Endangered, threatened, or otherwise listed terrestrial species**  
**reported from Campbell and Scott Counties, Tennessee.**

Common Name	Scientific Name	State Status	Federal Status
<i>Amphibians</i>			
Black Mountain Dusky Salamander	<i>Desmognathus welteri</i>	In Need of Management	—
<i>Birds</i>			
Cerulean Warbler	<i>Dendroica cerulea</i>	In Need of Management	—
Swainson's Warbler	<i>Limnothlypis swainsonii</i>	In Need of Management	Management Concern*
Golden-winged Warbler	<i>Vermivora chrysoptera</i>	In Need of Management	Management Concern
<i>Mammals</i>			
Woodland Jumping Mouse	<i>Napaeozapus insignis</i>	In Need of Management	—
Hairy-tailed Mole	<i>Parascalops breweri</i>	In Need of Management	—
Smoky Shrew	<i>Sorex fumeus</i>	In Need of Management	—
Southern Bog Lemming	<i>Synaptomys cooperi</i>	In Need of Management	—
<i>Plants</i>			
Canada Lily	<i>Lilium canadense</i>	Threatened	—

\*Management Concern is a non-regulatory status indicating concern for the species.

**Table 2.**  
**Endangered, threatened, or otherwise listed aquatic species**  
**reported from Campbell and Scott Counties, Tennessee.**

Common Name	Scientific Name	State Status	Federal Status
<b>Fish</b>			
Emerald darter	<i>Etheostoma baileyi</i>	In Need of Management	-
Ashy darter	<i>Etheostoma cinereum</i>	Threatened	Management Concern*
Arrow darter	<i>Etheostoma sagitta</i>	In Need of Management	-
Blackside dace	<i>Phoxinus cumberlandensis</i>	Threatened	Threatened

\*Management Concern is a non-regulatory status indicating concern for the species.

In a June 10, 2002, correspondence, the TWRA expressed comments and concerns related to the proposed project. These comments and concerns were related to the presence of federally listed species in the Straight Fork stream system and to the maintenance and post-mining condition of the roads proposed to be retained as a part of the mine plan. In developing the proposed project, the applicant has addressed many of the TWRA concerns.

In a letter to the applicant dated January 8, 2002, the U.S. Fish and Wildlife Service (FWS) indicated that their records showed a federally listed threatened or endangered species (Indiana bat) occurring within approximately 6 miles of the project. The FWS requested that potential impacts to the species be evaluated. In a February 20, 2002, correspondence, the applicant indicated that a review of the proposed project site revealed that neither suitable bat hibernacula nor roosting habitat existed on the proposed mine site. As such, in a February 28, 2002 correspondence to the applicant and an April 22, 2002, correspondence to OSM, FWS determined that Endangered Species Act requirements had been fulfilled. However, following the June 10 notification from TWRA as to the previously unknown presence of blackside dace in Straight Fork, OSM reinitiated informal consultation with FWS. The reinitiated informal consultation process concluded in a July 18, 2002, correspondence from FWS which concluded that "the potential impacts to the blackside dace has been adequately addressed at this time." OSM has concluded that the operation, as proposed, should have no effect on any threatened or endangered species, or result in destruction or adverse modification of critical habitats.

## 5. Cultural and Historic Resources

The Deputy State Historic Preservation Officer (DSHPO) stated in a letter dated December 6, 2001, that the proposed operation will have no effect on National Register listed or eligible properties.

6. Air Quality, Socioeconomics, and Public Controversy

As the proposed permit area is a rural area with little or no industrial development, air quality is generally considered to be good. The Tennessee Department of Environment and Conservation has determined that the air quality of Campbell and Scott Counties is of sufficient quality that monitoring is not required or necessary. Data available on the EPA website at <http://www.epa.gov/oar/oaqps/greenbk/anc1.html> indicated that as of May 17, 2004, the closest designated non-attainment area for the "criteria" pollutants, in this case the 8-hour ozone standard, was Anderson County, located over 10 miles south of the proposed mine site. Previous mining in this area of Campbell and Scott Counties is not known to have caused any measurable air quality degradation.

In 2002, the Campbell County population was estimated at 40,013. In 2000, agriculture/forestry/fishing and hunting/ and mining related jobs in Campbell County ranked lowest of the 13 industry employment categories and comprised 1.4 percent of employment in the county. In 1999, it was estimated that 22.8 percent of the population in Campbell County lived at or below the poverty level compared to 13.5 percent for the state as a whole. According to figures released for 2000, approximately 97.6 percent of the population in Campbell County was classified as White/non-Hispanic while 79.2 percent of the state population was so classified. Approximately 0.3 percent of the population was classified as Native American, the same as for the statewide population.

In 2002, the Scott County population was estimated at 21,558. In 2000, agriculture/forestry/fishing and hunting/ and mining related jobs in Scott County ranked 10<sup>th</sup> of the 13 industry employment categories and comprised 2.5 percent of employment in the county. In 1999, it was estimated that 20.2 percent of the population in Scott County lived at or below the poverty level compared to 13.5 percent for the state as a whole. According to figures released for 2000, approximately 98.1 percent of the population in Scott County was classified as White/non-Hispanic while 79.2 percent of the state population was so classified. Approximately 0.2 percent of the population was classified as Native American, compared to 0.3 percent for the state population at large (U.S. Census Bureau).

A 30-day period was provided for interested parties to submit comments and/or request an informal conference/public hearing on the proposed coal mine application. A public hearing was not requested. OSM received no comments from the public at-large concerning the proposed mining. Comments were solicited from other government agencies as well. OSM received comments from the National Park Service (Big South Fork), FWS, TWRA, DNH, and DSHPO. Comments received were generally related to concerns about possible impacts to water quality, threatened/endangered species, and assuring that disturbed areas



were properly reclaimed. All comments received regarding the proposed operation and reclamation plan were given serious consideration during the technical review process. Comments received from these agencies have been made a part of the administrative record associated with this permit application, and are available for public review at OSM's Knoxville Field Office.

#### 7. Wetlands, Floodplains, and Wild and Scenic Rivers

No wetlands or floodplains were identified in the vicinity of the proposed mine site. There is however an identified floodplain located along Montgomery Fork near the southern end of the haul road. As the road is existing, it is unlikely that any road-related construction will occur in the floodplain. However, the haul road may require the acquisition of State-approved general Aquatic Resources Alteration Permits (ARAPs) where it crosses streams. The Obed Wild and Scenic River is over 26 miles from the proposed mine site and is in an entirely different watershed (the Emory River) than is the proposed mine. As such, OSM has determined that no wetlands, floodplains, or wild and scenic rivers would be affected by the proposed mining and reclamation operation.

#### G. Environmental Impacts

In addition to the following discussion of impacts associated with the proposed alternatives, impacts to the environmental resources within and adjacent to the proposed permit area are also described in the permit application and OSM's environmental impact statement (OSM-EIS-18) for the Federal Program for Tennessee.

##### Alternative 1

Approval and implementation of U.S. Coal's operation and reclamation plan and permit issuance will result in temporary changes to some existing environmental resources such as: (1) topography, (2) land use, (3) wildlife and its habitat, (4) air quality, (5) esthetics and (6) hydrology. Short term or temporary economic impacts are anticipated as well. The duration and the intensity of the temporary impacts to the environmental resources identified above are predicted to last from 7.3 years (the life-of-mine) to 12.3 years (final bond release), and the intensity is predicted to be initially adverse and diminishing to minor.

The topography, land use, and wildlife habitat will be adversely impacted initially as a result of the land being temporarily disturbed for the recovery of the coal resource. The topography will be further altered during removal and storage of spoil materials; however, these spoil materials will be regraded during reclamation of the site to reestablish topographic conditions that approximate those which existed before disturbances associated with this permit.

Land clearing operations will eliminate the successional vegetation that has developed on the mine face-up portion of the proposed permit area (approximately 4.9 acres). This will adversely affect wildlife habitat in the immediate vicinity of the site and will result in the more mobile species being displaced. The haul road portion of the proposed permit area (approximately 29.5 acres) is existing and as such will require little additional disturbance to existing vegetation / habitat. The operation, as proposed, should have no adverse effect on any federal or state listed threatened or endangered species. Appropriate sediment control measures have been incorporated into the proposed mining plans so as to minimize impacts to the habitat of aquatic species. When U.S. Coal reclaims the proposed mine site, the ground cover and shrubs to be reestablished will enhance wildlife habitat and provide opportunity for the displaced species to reinhabit the area as well as different species inhabiting the area. Measures proposed in the operation and reclamation plan such as establishment of the grass - legume herbaceous ground cover as well as the shrub species proposed to be planted will provide habitat diversity and enhance the establishment of wildlife.

Vegetation, soils, and wildlife habitat within the proposed permit area will be adversely affected during mining. The haul road portion of the proposed permit areas (approximately 29.5 acres) is existing and as such will require little additional disturbance to existing vegetation/habitat. Land clearing operations will eliminate the successional vegetation that has developed on the mine face-up portion of the proposed permit area (approximately 4.9 acres). Existing soils on the mine face-up area will be removed. This will adversely affect wildlife habitat in the immediate vicinity of the site. The proposed mining activities would result in some direct mortality of slow-moving terrestrial species. Temporary habitat loss and noise associated with proposed mining activities would result in the displacement of more mobile species into adjacent habitats. Once the proposed mining is completed (7.3 years), the subsequent reclamation of the disturbed areas would reduce impacts to local populations of wildlife by providing opportunity for many of the displaced species to reinhabit the area as well as open the possibility for other local species to inhabit the area. A number of mitigation measures such as salvaging and replacing the topsoil/substitute growth medium, prompt reestablishment of a vegetative cover planned to enhance wildlife, and retention of the power poles as bird roosts (pole retention requested by TWRA) have been incorporated into the mine plan. These mitigation measures will serve to protect wildlife and enhance their habitat by providing habitat diversity, will generally limit the duration of impacts to the life-of-mine and final bond release (approximately 12.3 years), and limit the extent of impacts to the area of and immediately adjacent to the disturbance associated with this proposed permit area.

Results of restoration studies performed on reclaimed mines at nearby Brushy and Walnut Mountains (TVA 1981), as well as other studies elsewhere, support this conclusion. These studies indicate that wildlife quickly move into reclaimed habitats. Populations of small mammals moved into reclaimed areas within 2 months of planting new vegetation and breeding aggregations of amphibians were noted within settling ponds within the first year. These areas were quickly repopulated by species that favor early successional

habitats. Species that favor forested habitats would later move into the reclaimed areas as the postmining vegetation reverts to woodland habitats.

The proposed implementation of operation and reclamation plans result in direct impacts to terrestrial animal populations in the project area as described above. However, due to the fact that the proposed areas of disturbance are relatively small (34.6 acres), areas such as the haul road are largely already existing and have been for a number of years, and the large amounts of similar habitat adjacent to the project area, impacts to terrestrial wildlife in the region would be temporary and are unlikely to have adverse impacts on the wildlife population as a whole in this area. The project is not expected to result in significant cumulative impacts to terrestrial animal communities, increase populations of exotic or invasive terrestrial animals, or result in significant adverse impacts to migratory birds in the region.

Impacts to fishery resources are best analyzed in the context of impacts to their habitat or water quality. Potential impacts to the receiving streams associated with this proposed mine site are discussed in the probable hydrologic consequences (PHCs) and hydrologic reclamation plans (HRPs) prepared by the applicant and in the CHIA prepared by OSM. The analysis in the CHIA considers all existing and anticipated mining operations and addresses potential cumulative hydrologic impacts.

These assessments conclude that while there is little or no potential for acid/toxic drainage and slightly increased potential for sediment loads into the receiving streams during site development and in association with the use of the haul road, the effects would be minimized by measures to be implemented during active mining and during reclamation of the site. These measures included controls such as diversion of flows from unaffected upslope areas around the proposed mine site, diversion of all run-off from the mine face-up area to a sediment basin, construction of sediment sumps along sections of the haul road, and maintaining the road and treatment measures so that they continue to function as planned. Surface water monitoring of Simpson Branch and of the sediment basin discharges would be conducted in accordance with SMCRA and NPDES permit requirements to ensure that water quality impacts to receiving streams are minimized. The applicant will also be required to monitor discharges from the haul road in accordance with the storm water provisions of their NPDES permit. This monitoring will continue until mining/reclamation is complete and all reclamation responsibilities have been met.

This hydrological analysis of the PHC and CHIA indicates that water quality in the receiving streams should remain within acceptable limits. Therefore, this proposed mining activity would likely result in only temporary impacts and is unlikely to jeopardize fishery resources in the Straight Fork and Montgomery Fork drainage systems.

Temporary impacts to surface water hydrology are likely. Removal of the vegetation associated with development of the mine entries will decrease the evapotranspiration function that normally would have occurred via the existing vegetation. Run-off from the

area of the mine site proper will be affected by the disturbance of the soil and rock materials present in the mine-face up area, by the construction of a sediment basin which will retain a certain volume of water before discharge occurs and will permit evaporation of impounded water, and by the pumping of any ground water which enters the underground mine workings to the sediment pond during the period of time that the mine is active. Given the relatively small nature of the site, the geology of the area, and the limited recharge area overlying the coal seam to be mined, it is anticipated that only minor alterations in surface or ground water quantities will occur. During the active mining phase, any ground water that does enter the underground mine will be pumped to the sediment pond. As indicated above, sediment pond discharges will be monitored under the requirements of both Section 402 of the Clean Water Act and SMCRA. Any pumping that is necessary will cease upon completion of active mining.

OSM anticipates that during the life-of-mine, the discharge from the Deep Mine No. 11 will not adversely impact Straight Fork Creek such that it would fail to meet its designated use classification. The reader is referred to the above referenced CHIA and the proposed mine application PHC and HRP for more detailed discussions of the ground and surface water systems in this area and the potential for hydrologic impacts.

During the life-of-mine, pumping/dewatering of the underground mine may occur on an infrequent and limited basis. Any increase in flow to the receiving streams will, as described above and in the CHIA / PHC, be minimal. OSM predicts that this increase in flow will not increase the potential for flooding of the downstream areas. The nearest populated area downstream of the proposed mine is located an estimated 1.5 miles downstream and is unlikely to be adversely impacted by potential flow increase.

Measures have been incorporated into the approved plan to prevent adverse impacts to public parks. Cove Lake State Park is approximately 6.5 miles from the proposed mine and is in neither the viewshed nor watershed of the proposed mine site. As such, Cove Lake should not be impacted. Big South Fork NRR is approximately 13.5 miles from the proposed mine site. Although it is not in the viewshed, it is in the same watershed as the proposed mine development. Big South Fork NRR is estimated to be at least 21 miles downstream from the proposed permit area. After considering the measures required in the proposed application to prevent or mitigate water quality impacts (e.g. sediment control pond, haul road sumps, water monitoring, etc.) and the anticipated impacts described in this EA and its various supporting documents, it is unlikely that Big South Fork would be adversely impacted by the proposed mine site. As previously mentioned, Cumberland Trail State Park is approximately 1.5 miles south of the haul road and 4 miles south of the proposed mine site proper. The mine site proper is on a north-facing slope and as such, will not be in the viewshed of the trail. Some portions of the haul road may be in the viewshed of the trail, but the haul road already exists. At the distance of 1.5 to 4 miles away, any impacts to the trail other than those the existing haul road already has created would likely be minor and consist primarily of visible dust associated with coal truck use of the unpaved haul road. This would be minimized by the

fugitive dust control measures proposed in the mine plan. The noise of the trucks would likely not be noticeable above background noise levels at these distances. Frozen Head State Park and Indian Mountain State Park are each over 16 miles away from the proposed mine site and like Cove Lake, are not impacted as they are in different viewsheds and watersheds.

As the proposed mine site is located within RBWMA, RBWMA is the most likely public use area to be impacted. The area is used by the public for occasional recreation activities such as hunting, fishing, camping, hiking, off-road vehicle use, wildlife observation, horseback riding, mountain biking, etc. Those who use the portion of RBWMA in the vicinity of the proposed mine and haul road will be able to easily see the mine and will notice increased noise and dust associated with the operation of the mine, especially the hauling of the coal and the comings-and-goings of those who are employed at the mine. A portion of the haul road near the mine is presently used by members of the public recreating in RBWMA. Traffic associated with mining activities could cause occasional brief interruptions. The majority of the haul road has been closed to public access and thus its use would not directly affect recreational activities. As indicated above, the proposed fugitive dust control plan will mitigate the dust impacts somewhat, but dust will still be created in the immediate vicinity of the haul road. These impacts will continue over the 7.3-year life of the operation and may result in some users of the RBWMA such as hunters having to pursue their recreational activities in areas of RBWMA that are somewhat removed from the permit area.

No one lives within 1.5 miles of the proposed mine face-up or along the permitted portion of the haulage route. Only one residential structure is located within 0.1 miles of the unpaved county road between the permitted haul road and the paved county road. Coal trucks will haul coal for processing via this unpaved section of public road. Once these trucks reach the paved portion of the public road system, impacts associated with dust diminish to the point that they are no longer of any concern. Based on production estimates and coal tonnage hauled per truck, it is estimated that there will be 36 round trips per workday between the mine site and the processing facility. Dust impacts will be most noticeable during periods of dry weather and will be mitigated to a degree by the above mentioned fugitive dust control plan. Noise associated with the haulage of the coal some 4 to 5 miles to the processing facility via paved public roads will adversely affect the quality of life for those who live along this road. These 36 truck round trips per workday will likely be a nuisance to those living along the roads. Based on the reported work patterns associated with the applicant's mines, the increase in noise levels associated with the coal trucks will only occur during daylight hours and will not occur on Sunday. The increase in noise levels will be limited to the life-of-mine.

As indicated above, there is 1 residential structures located within 500 feet of the unpaved public road over which coal will be transported. Residents of those structures estimated to be within 500 feet of the unpaved road are most likely to be impacted from reentrained dust. Reentrained dust is that which is put into the air by reason of vehicles driving over

dirt roads and dusty areas. As total suspended particulate (TSP) levels are typically 85 percent less on paved roads than TSP levels associated with the use of unpaved roads (EPA, 1983), this discussion will focus on the use of unpaved roads. To determine potential air quality impacts to these residents, OSM has used a 1984 study conducted by PEDCO Environmental, Inc. (PEDCO, 1984). The PEDCO study used TSP as a standard in the analysis. The study projected that TSP increases beyond 650 feet from the source of reentrained dust (i.e. the unpaved road) would be within the primary air quality standards set for the protection of public health. The study further concluded that at a distance of 0.62 miles (3,275 feet), the TSP criterion was met for both primary and secondary limits (secondary limits are established to protect public welfare including protection against decreased visibility, impacts to vegetation, etc.).

Given the findings of the above referenced study and the distances between the unpaved public road and the potentially impacted residences, OSM has determined that it is unlikely that reentrained dust from sources associated with the proposed mining operation will cause any health impacts (i.e., exceed primary air quality standards) to residents living 650 feet or more from a dust source. Although there is 1 structure located within 650 feet of a likely dust source, that being the unpaved public road, implementation of the proposed air pollution control plan should reduce reentrained dust to levels below primary air quality standards. This conclusion is based on the fact that, as reported in Table 4-7 of the Tennessee Federal Program EIS (OSM-EIS-18), spraying water on unpaved roads reduces emissions by approximately 50 percent (USDOJ / OSM, 1985). As watering unpaved roads is the principal dust control measure specified in the applicant's proposed air pollution control plan, OSM has concluded that with the implementation of the approved fugitive dust control plan, dust emissions should not cause health impacts to the residents referenced above.

As for secondary air quality standards, OSM recognizes that even with the implementation of the approved air pollution control measures, it is possible that at certain times during the 7.3 year life-of-mine, dust in excess of secondary standards will occur. Although in Tennessee, high humidity and lower wind speeds generally favor the settling of dust close to its source, during dry time periods, the closest residents to the proposed mine site may be impacted. These impacts will generally be nuisance-type impacts occurring primarily in the form of esthetic impacts and deposition of dust on personal property. These impacts would largely end upon completion of mining and reclamation activities.

Very little blasting will be necessary in developing the planned mine site. In the first few weeks of construction as the mine face-up area and sediment pond are being built, it is likely that a few shots or blasts will be required. After that, blasting is unlikely. Impacts to air quality (airborne dust and fumes) from blasting and other mining operations are generally localized within the immediate area of the mining site. This conclusion is supported by a recent study, completed by the Department of Mining Engineering at West Virginia University, which included the study of dust and fume emissions from 10

blasting events at three mines. Results of this initial study indicate that detectable concentrations of respirable dust, total dust, nitrogen dioxide, nitric oxide, carbon monoxide and ammonia were found in ambient air at locations both in close proximity to the mining operation and at a distance greater than 1,000 feet from the blasting operations. However, the study further concluded that a significant reduction in detected concentrations of measured contaminants was found when the distance from the blasting operations was increased. Investigators found no indication that there are any significant health risks due to exposure to dust and fumes when no personnel are in close proximity to the blast zone. Conclusions of this investigation indicate that fugitive dust and fume emissions presented no potential health problem for the following reasons:

- No event produced any “harmful” levels of any duration at distances exceeding 1,000 feet, except one measurement of 3.6 ppm NO<sub>2</sub> (nitrogen dioxide) at 1,251 feet; and
- The NO<sub>2</sub> measurement at 1,251 feet and all others were of short duration. (English, 2001)

As residential properties in this area are all located well in excess of 1,250 feet from the blasting area, OSM anticipates no adverse impacts to public health as a result of blasting. The proposed mine plan also requires that access to the blasting site be controlled and the amount of explosive used be limited such that public safety and property damage will not occur as a result of blasting conducted in accordance with established regulatory controls. To further protect an individual’s property interest, property owners within a ½ mile radius of the proposed blasting are provided an opportunity, at no cost to them, to request a pre-blast survey of their structural property in order to document its present condition. In the event that blasting exceeds established controls, this pre-blast survey helps to more clearly establish liability for any structural damage that may occur.

Because of the rural nature of this area, background or ambient noise levels are expected to be low. In a noise study of a similar rural area in the southern Cumberland Plateau area of Tennessee, ambient noise levels were estimated in the 35-40 decibel (db) range (USDOJ/OSM, 1986). The primary mining-related sources that would contribute to noise impacts are blasting, equipment operation, and coal transportation.

Blasting would be the strongest and most pervasive source of noise associated with mining. Under the Federal regulations [30 CFR 816.97(b)] noise associated with blasting may not exceed 129 to 133 db depending on the type monitoring equipment used to measure the blast noise. These standards have been set to protect public health and safety and were not intended to preserve the highest levels of esthetic qualities in an area. Under federal regulation, blasting will occur only between sunrise and sunset. As indicated above, blasting noise will occur infrequently (only a few blasts will be necessary in the early stages of mine development), will last only for a very brief period (i.e. a few seconds), will occur only during daylight hours, and will likely not occur on

Sundays. Although no impacts to health and safety are anticipated from airblast, blasting-related noise will be a nuisance-type impact and will have periodic adverse effects on the quality of life of residents living in close proximity to the mine site or to users of the nearby public areas such as RBWMA or Cumberland Trail.

In the above referenced noise study, noise levels from mining activities, including equipment operation and coal transportation, were estimated for 5 hypothetical mines at 10 representative sites. Noise level increases (expressed as average A-weighted sound level during a specified period of time, in this study 10 hours) at the 10 sites varied from 0 db to as much as 16 db. When added to the estimated noise levels for this rural area (35-40 db), maximum noise levels would be in the range of 51 to 56 db. The American National Standards Institute indicates that yearly average noise levels of 55 db are compatible for neighborhood parks and 60 db for wildlife and recreation areas (USDOI/OSM, 1986). As such, projected noise levels occurring as a result of non-blast related mining activities would generally not raise noise standards in the vicinity of the proposed mine site above acceptable levels.

This is of course not intended to imply that local residents won't notice the increase in ambient noise levels. Residents may indeed notice noise level increases and perceive these increases to adversely impact the quality of life that existed in this area prior to mining with the exception of the initial blasting-related noise. Any perceived noise increases associated with the proposed mining and coal haulage will generally remain constant through completion of coal removal activities. Any noise increases would essentially end upon completion of all mining and reclamation activities, a period of approximately 7.3 years.

With the exception of the previously discussed visual esthetic impacts related to coal haulage activities, the proposed mine site and activities associated with coal removal are likely to have little if any visual impact on the public beyond the users of RBWMA and as described above, possibly the users of Cumberland Trail State Park. This is due to the fact that the mine site proper is approximately 1.5 miles from the closest public road or residential dwelling. There will essentially be no visual impacts associated with the proposed mine site on the occasional user of the nearby public roads or residents living along Straight Fork.

The proposed mining activity will provide jobs and tax revenues for the local and state governments. The applicant has indicated that approximately 50 people will have direct employment with the coal company during the life of this proposed project. (Smiddy, 2004) Goods and services purchased in the area by the applicant and employees of the applicant will provide direct support to the local economy, and through sales tax revenue, will provide indirect support to the local and state governments. The federal government will of course collect personal and business income tax revenue. The applicant must also pay a fee to the federal government of \$0.15 per ton for each ton of coal removed to help reclaim old abandoned mine sites. According to the applicant, local and state



governments also receive a total of \$0.20 per ton in tax revenue for each ton of coal removed. Revenues received by the local and state governments are an offset to expenses incurred by these government entities for things such as increased public road maintenance. The employment and tax revenues provided by the proposed mine will end upon completion of mining and reclamation activities.

In addition to these temporary changes, some permanent or long term changes will occur during the course of the mining and reclamation operation such as: (1) additional alteration of the geologic strata, (2) increased infiltration rates through the backfilled material, and (3) postmining vegetative cover. Proper implementation of the proposed operation and reclamation plan including the hydrologic reclamation plan (HRP) is predicted to prevent or minimize the long-term adverse effects that may occur from the permanent changes.

The proposed underground mining will permanently alter the geology of the area by removal of much of the coal seam within the identified mine boundaries. U.S. Coal, through a process of geologic sampling and overburden analyses, did not identify a potential for the formation of acid or toxic drainage from geologic materials above or below the Red Ash seam. This is supported by the fact that U.S. Coal has and is mining nearby areas on the Red Ash seam and has had no problem with acid / toxic drainage. However, the coal seam was identified as a potential source of acid production. Any material associated with the coal such as coal fines and bedded coal associated with the coal stockpile area, will be removed from the site and disposed of at U.S. Coal's permitted preparation plant and refuse area. This disposal would be in accordance with the plans approved for the refuse area.

The HRP is required to specifically address the local hydrologic conditions and contains steps to be taken during mining and reclamation through bond release to: (1) minimize disturbances to the hydrologic balance within the permit and adjacent areas, (2) prevent material damage outside the permit area, (3) meet applicable Federal and State water quality laws and regulations, and (4) protect the rights of present water users. During the technical review of the proposed HRP, OSM evaluated the: (1) geochemistry of the overburden and coal mine floor materials in conjunction with the proposed underground mining plan, and (2) movement and quantity of water through the mine voids and spoil materials to determine the resulting water quality of discharges from the disturbed area into the receiving streams.

The hydrology in the immediate vicinity of the permit area has been altered by the previous mining and will be altered further by this proposed mining. Currently there are no developed ground water sources known to be in use within or in the vicinity of the mine site. Permanent mining-related impacts to the local ground water system (i.e., in the immediate vicinity of the proposed mine site) are anticipated and described in the CHIA, PHC, and HRP. Residents in the alluvial valley floor along Straight Fork Creek reportedly obtain their water from the Huntsville Utility District. Any ground water users

that may currently obtain their water from wells located in the closest populated areas (i.e., homes in the alluvial valley floor area) are unlikely to be adversely affected as the proposed Deep Mine No. 11 is over 1.5 miles from these wells and some 800 ft. in elevation above the wells, thus decreasing the likelihood that there is any ground water hydrologic connectivity between the proposed mine site and wells.

In summary, the conclusion of the CHIA is that surface and ground water quality and quantity would not be significantly affected by the proposed mining and reclamation operations. The water quality of the receiving streams, various tributaries of Straight Fork and Montgomery Fork, should not be adversely impacted. Flow analysis indicates that no appreciable increase in stream flow is anticipated and as such, no adverse impact (i.e., change in stream use classification) is anticipated in association with any increase in stream flow. As a result, OSM has determined that no adverse impacts to the hydrologic balance of this area would result from the proposed activities. This is discussed in greater detail in the CHIA, PHC, and HRP.

The soil structure and profile and the successional vegetation that has developed on this site over the years since the area was initially mined will essentially be eliminated during development of the proposed 4.9 acre mine face-up area. This redisturbance will increase infiltration into spoil materials until such time as soil profiles and successional vegetation begin to become established. A recent study has been conducted on the redevelopment of soils on reclaimed coal mine sites in West Virginia. (Sencindiver, 2001) The study was conducted on a number of mine sites that had been reclaimed for 8 - 30 years. This study indicated that although the minesoils varied, they are approaching stable, developed soils and should become more like the native soils as they continue to develop. So in the short term, disturbance to soils will be complete but mitigated to a large extent by the salvaging and redistribution of the soil growth medium. However, the study confirms that development of soils and soil profiles more similar to the native soils is likely to occur over a period of years following completion of mining.

The postmining vegetative cover will differ from that which currently exists on this site. It will be a number of years before vegetative succession occurs and trees become established similar to present site conditions. However, until this succession occurs, implementation of the proposed topsoil/substitute handling and revegetation plans will help to ensure that the replaced soil growth medium will support the vegetative cover proposed for the reclaimed mine site.

After having considered the measures incorporated in the proposed permit application to prevent, minimize, or mitigate impacts to protected species and the impacts to the hydrologic regime predicted in the permit application and OSM's cumulative hydrologic impact assessments for this proposed permit, OSM concludes that the proposed underground coal mining operation should provide adequate protection for the above Federally and state listed threatened and endangered species.

## H. Environmental Justice

As indicated earlier in this environmental assessment (EA), a significant portion of the population of Campbell and Scott Counties live in households with incomes below the poverty level. The coalfields in the eastern United States fall largely within the Appalachian region. The Appalachian region, particularly the coalfield portions of this region, is generally a rural, ruggedly, mountainous area often with poorly developed transportation systems. As a result, commercial development such as industries and tourism which would improve employment opportunities and thus income levels, have been quite restricted. Thus the Appalachian region has, when compared to national standards, a disproportionate level of low income areas. In this respect, the communities in the vicinity of the proposed permit area are likely typical of much of the rural, Appalachian coalfield communities as they likely include a disproportionate number of low-income households. The EA has predicted varying levels of impact, from no impacts to minor or moderate impacts, to such resources as aquatic habitats; historic/cultural resources; surface and ground water hydrology; air quality; and aesthetics (visual, background noise, and blast vibrations) at residential or public use areas. The provisions of the proposed application provide for the safety of the public. No reasonably foreseeable cumulative adverse impacts are expected to affect the surrounding communities as indicated, for example, in the cumulative hydrologic impact assessments prepared in association with this proposed permit. Should significant human health or environmental effects have been associated with the proposed issuance of this permit, these effects would likely have been disproportionately high on the nearby rural community in this area. As only minor to moderate impacts are anticipated as a result of the proposed issuance of this permit, the communities in this area are not anticipated to be significantly impacted.

Pursuant to Presidential Executive Order 12898, "Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations (February 11, 1994), OSM has, during the permit application review process and development of this NEPA document, focused attention on human health and environmental conditions in the communities that may be affected by the proposed mining activities. The public participation process associated with this proposed application has been inclusive, as required by the EJ executive order. Some residents in the communities located near the proposed mine site may feel that efforts to make them aware of a proposed mine are insufficient; that they are not provided adequate opportunity to participate in the permit process; or that if aggrieved by a mining operation, the complaint process is too challenging and intimidating. However, SMCRA regulations have established numerous opportunities to make the public aware of proposed mining and potential impacts to human health and the environment and to solicit input from interested parties. For example, notices are mailed to local officials, agencies, and utilities when a permit application is received. The permit application is available for public review at a place accessible to the public, in this case the Campbell and Scott County courthouses.

SMCRA requires ads in the local newspaper(s) weekly for four consecutive weeks advising the public of the proposed project, where and when the application is available for review, and where to send comments and/or request a public hearing on the proposed permit. In this case, a public hearing was not requested.

Also, an ad is placed in the local newspaper again before any blasting is to occur. If blasting is proposed, blasting notifications are mailed to everyone living within ½ mile of a mine site. Furthermore, if a NEPA document for a federal action is required, as is the case with this proposed action, the public is advised of the preparation and availability of the document in accordance with established NEPA regulations. The above described efforts to inform the public and provide opportunities for input into the permit review process is in addition to a separate but similar public participation process undertaken by the State of Tennessee under Section 402 of the Clean Water Act (NPDES). OSM believes these notifications are more than adequate to notify the public of proposed mining, advise the public of potential impacts, solicit input from those potentially affected, and comply with both the requirements and the spirit of the EJ executive order.

#### Alternative 2

Disapproval of the operation and reclamation plan and non-issuance of a permit will prevent the temporary and permanent changes and associated environmental impacts from occurring. Disapproval would also result in the loss of employment opportunities associated with this mine site as well as the loss of revenue to the local economy and county tax base.

#### I. Summary

OSM proposes to issue a permit to U.S. Coal, Inc. to conduct surface coal mining and reclamation operations as approved in the permit application. OSM has determined that the mining and reclamation operation as proposed in the permit application is an environmentally sound plan. Environmental resources likely to be impacted by this operation are described in Section G. Impacts to these resources will be controlled during active mining and will be prevented, minimized, or abated during and following reclamation of the site. A map is enclosed showing the location and boundary of the proposed permit area.

#### J. Consultations

OSM contact for the proposal:

Doug Siddell, Supervisor  
Technical Group  
Knoxville Field Office  
Office of Surface Mining  
530 Gay Street, S. W., Suite 500  
Knoxville, Tennessee 37902

Agencies contacted in reference to the proposed action:

All county, State, and Federal agencies having legal jurisdiction, regulatory control, or coordination responsibility concerning permit issuance have been provided an opportunity to submit comments.

U.S. Fish & Wildlife Service  
446 Neal Street  
Cookeville, Tennessee 38503-0845  
U.S. Army Corps of Engineers  
P.O. Box 1070  
Nashville, Tennessee 37202-1070

Big South Fork National River and Recreation Area  
4564 Leatherwood Road  
Oneida, Tennessee 37841

USDA, Natural Resources Conservation Service  
P. O. Box 120  
Jacksboro, Tennessee 37757

USDA, Natural Resources Conservation Service  
P. O. Box 4675  
Oneida, Tennessee 37841-4675

Tennessee Wildlife Resources Agency  
Region IV  
3030 Wildlife Way  
Morristown, Tennessee 37814

Tennessee Division of Natural Heritage  
14<sup>th</sup> Floor, L&C Tower  
401 Church Street  
Nashville, Tennessee 37243

Tennessee Division of Water Pollution Control  
2700 Middlebrook Pike, Suite 220  
Knoxville, Tennessee 37921-5602

Tennessee Historical Commission  
Tennessee Department of Environment and Conservation  
2941 Lebanon Road  
Nashville, Tennessee 37243-0442

Cumberland Trail State Park  
125 Village Green Circle  
Lake City, Tennessee 37769

TVA Environmental Policy and Planning  
400 West Summit Hill Drive, WT8C-K  
Knoxville, Tennessee 37902-1499

District Manager  
Mine Safety and Health Admin., District 7  
HC66, Box 1762  
Barbourville, Kentucky 40906

Campbell County Executive  
P.O. Box 435  
Jacksboro, Tennessee 37757

Scott County Executive  
2845, Baker Highway, P.O. Box 180  
Huntsville, Tennessee 37756

J. Preparer

Jeff Coker, Biological Scientist  
Technical Group  
Knoxville Field Office  
530 Gay Street, S.W., Suite 500  
Knoxville, Tennessee 37902

K. References

English, Lloyd M. and Yi Luo. "Study of Fugitive Dust and Fumes." West Virginia University, 2001.

Knoxville News Sentinel. June 6, 2004. Section F, Pg. F1 and F3.

PEDCO Environmental, Inc. 1984. Assessment of impacts on the surface coal mine industry resulting from possible changes to PSD and ambient air quality standards.

Presidential Executive Order 12898, "Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations (February 11, 1994)."  
<http://www.nonoise.org/library/execords/eo-12898.htm>.

Rosenberg, Kenneth V., et al. 2000. "An Atlas of Cerulean Warbler Populations, Final Report to USFWS: 1997-2000 Breeding Seasons." Cornell Lab.

Sencindiver, John, et. al. 2001. Soil Health of Mountaintop Removal Mines in Southern West Virginia, Revised Project Report. Division of Plant and Soil Sciences, West Virginia University.

Smiddy, Johnny, Mine Superintendent / U.S. Coal, Personal Communication, June 16, 2004.

Tennessee Division of Natural Heritage. April, 2004 Update. Quarter quad database information ([http://www.state.tn.us/environment/nh/qq/tnqgeo\\_j.htm](http://www.state.tn.us/environment/nh/qq/tnqgeo_j.htm)).

Tennessee Valley Authority. 2002. Braden Mountain Surface Mine, Campbell and Scott Counties, Tennessee. Draft Environmental Assessment.

Tennessee Valley Authority. 1981. Rapid restoration of biological productivity to coal surface mines: Annual biological monitoring report. Division of Land and Forest Resources, Norris, TN.

Tennessee Wildlife Resources Agency. 2002. Fisheries Report No. 03-04, Warmwater Stream Fisheries Report, Region IV, 2002.

U.S. Census Bureau Data for Tennessee / Campbell and Scott Counties, ([www.census.gov](http://www.census.gov)).

U.S. Coal, Inc., Deep Mine No. 11, Permit Application No. TN-014.

U.S. Department of the Interior, Office of Surface Mining, Cumulative Hydrologic Impact Assessments for U.S. Coal, Inc., Deep Mine No. 11, Permit Application No. TN-014.

U.S. Department of the Interior, Office of Surface Mining, Comprehensive Impacts of Permit Decisions under the Tennessee Federal Program OSM-EIS-18, March 1985.

U.S. Department of the Interior, Office of Surface Mining. 1986. Rock Creek Watershed, Tennessee Petition Evaluation Document/Environmental Impact Statement OSM-EIS-22 (Draft).

U.S. Environmental Protection Agency. 1983. Supplement No. 14 for compilation of air pollution emission factors: 3d ed., Research Triangle Park, North Carolina.

U. S. Environmental Protection Agency, "Currently Designated Nonattainment Areas for All Criteria", May 17, 2004. (<http://www.epa.gov/oar/oaqps/greenbk/ancl.html>)



# GENERAL LOCATION MAP

FILE DWG: USC-M11-GLM

SCALE: 1"=2000'

BLOCK & PIONEER QUADS.

U.S. COAL, INC.  
130 COAL STREET  
HUNTSVILLE, TN 37756

CAMPBELL COUNTY  
LAT: 36°22'04"  
LONG: 84°19'01"

DEEP MINE NO. 11

MAP PREPARED BY:  
IRTEC

▲ DISCHARGE MONITORING POINT



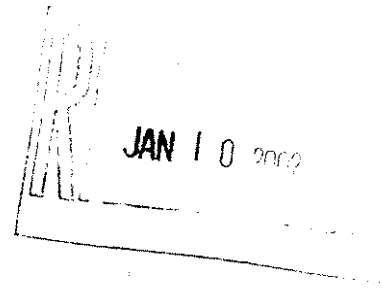


# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

446 Neal Street  
Cookeville, TN 38501

January 8, 2002



Mr. Tim K. Slone  
IRTEC  
P.O. Box 306  
Caryville, Tennessee 37714

Subject: Proposed deep mine and associated activity, U.S. Coal, Inc., Deep Mine No. 11, Latitude 36°22'04", Longitude 84°19'01", Campbell County, Tennessee.

Dear Mr. Slone:


U.S. Fish and Wildlife Service personnel have reviewed your description, dated November 28, 2001, of the above-referenced mining proposal. Please consider the following comments during the permit application process.

The Indiana bat (Myotis sodalis) has been observed in a cave located approximately six miles from the proposed project site. This species uses structures such as caves and abandoned mine portals for hibernation. It feeds in open forested areas over and near water (e.g., streams, ponds, and depressional areas with permanent or semi-permanent water). During summer, the Indiana bat uses trees with exfoliating or deeply furrowed bark for roosting. The subject site may provide good summer or winter habitat for the species.

The applicant should determine the potential for impacts to the Indiana bat and report the findings to this office for concurrence or further appropriate coordination. We recommend that a protection and enhancement plan for the species be developed at this time.

Thank you for this opportunity to review the subject mining proposal. Please contact David Pelren of my staff at 931/528-6481 (ext. 204) or by e-mail at [david\\_pelren@fws.gov](mailto:david_pelren@fws.gov) if you have questions regarding these comments.

Sincerely,

  
Lee A. Barclay, Ph.D.  
Field Supervisor

xc: Beverly Brock, OSM, Knoxville, TN



# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

446 Neal Street  
Cookeville, TN 38501

February 28, 2002

MAR - 2 2002

Mr. Bill Ferrell  
IRTEC  
P.O. Box 306  
Caryville, Tennessee 37714

Subject: Proposed deep mining activity with surface disturbance, U.S. Coal, Inc., Deep Mine No. 11, Latitude 36°22'04", Longitude 84°19'01", Campbell County, Tennessee.

Dear Mr. Ferrell:

We indicated to Mr. Tim Slone, of IRTEC, in a letter dated January 8, 2002, that potential impacts to the Indiana bat should be addressed. You informed us by facsimile, dated February 20, 2002, that neither potential hibernacula (i.e., abandoned mine portals or caves) nor suitable roosting habitat (i.e., trees with exfoliating bark or crevices) exist on the proposed mine site.

Considering this information, we believe that mining as proposed will not adversely impact the Indiana bat. The Fish and Wildlife Service (Service) position is that the applicant has fulfilled requirements of the Endangered Species Act at this time. However, additional information (e.g., findings of currently unknown portals) may warrant future coordination between the applicant, the Office of Surface Mining, and the Service. Because Indiana bats are known to inhabit the general vicinity, we request that the applicant implement measures to protect and enhance habitat for the species wherever feasible. Such measures would include permanent retention of upland ponds that are stable and have good water quality.

Thank you for your continued coordination on these issues. If you have questions regarding these comments, please contact David Pelren of my staff at 931/528-6481 (ext. 204).

Sincerely,

Lee A. Barclay, Ph.D.  
Field Supervisor

xc: Beverly Brock, OSM, Knoxville, TN



# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

446 Neal Street  
Cookeville, TN 38501

April 22, 2002

RECEIVED  
KNOXVILLE  
FEDERAL GROUP  
APR 22 2002 1:29

Ms. Mary Angelyn Holmes  
Office of Surface Mining  
530 Gay Street, S.W., Suite 500  
Knoxville, Tennessee 37902


Subject: Proposed mining operation, U.S. Coal, Inc., Deep Mine No. 11. OSM Application No. TN-014, Campbell and Scott Counties, Tennessee.

Dear Ms. Holmes:

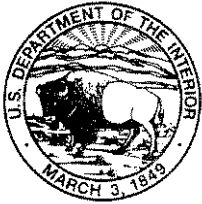
U.S. Fish and Wildlife Service (Service) personnel have reviewed the subject proposal. We previously provided comments to Mr. Tim Slone and Mr. Bill Ferrell regarding the subject proposal by letters dated January 8, 2002, and February 28, 2002, respectively (copies enclosed). The comments provided in those letters still apply. It is the position of the Service that Endangered Species Act requirements have been fulfilled at this time, but implementation of any protection and enhancement measures for the Indiana bat would be appreciated. We have no further comments regarding this permit application.

Thank you for the opportunity to review this project description. Please contact David Pelren of my staff at 931/528-6481 (ext. 204) if you have questions regarding our comments.

Sincerely,

  
for Lee A. Barclay, Ph.D.  
Field Supervisor

Enclosures



# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

446 Neal Street  
Cookeville, TN 38501

July 18, 2002

Ms. Mary Angelyn Holmes  
Office of Surface Mining  
530 Gay Street, S.W., Suite 500  
Knoxville, Tennessee 37902

Subject: Potential impacts to blackside dace, U.S. Coal, Inc., Deep Mine No. 11. OSM Application No. TN-014, Campbell and Scott Counties, Tennessee.

Dear Ms. Holmes:

I indicated to you in a letter dated April 22, 2002, that Endangered Species Act requirements regarding the subject permit application were considered to have been fulfilled at that time. In June 2002, Tennessee Wildlife Resources Agency personnel found blackside dace at several locations in the Straight Fork watershed near the proposed mine site. The proposed face-up site is approximately three miles from one of the dace locations. Doug Siddell of your staff and Fish and Wildlife Service biologist David Pelren discussed the potential for impacts to the Federally threatened fish in this particular situation. Please consider the following comments as you complete your review of the subject permit application.

Mr. Siddell indicated that the proposed face-up site is located on an existing mine bench. No material, including siltation structures, would be placed downstream of ephemeral stream reaches. Further, the applicant has proposed the use of significant sediment control measures including sumps below culverts to be placed along haul roads.

Because of the improved watershed conditions near the subject site, there is significant potential for the presence of blackside dace in any of the intermittent or perennial streams of the area. Therefore, the use of best management practices in association with the subject mine will be important. Given the proposed water quality protection measures, we believe the potential for impacts to the blackside dace has been adequately addressed at this time. Obligations under Section 7 of the Act must be reconsidered if (1) new information reveals impacts of the proposed action that may affect listed species or critical habitat in a manner not previously considered, (2) the proposed action is subsequently modified to include activities which were not considered during this consultation, or (3) new species are listed or critical habitat designated that might be affected by the proposed action.

Thank you for the continued coordination. Please contact Mr. Pelren of my staff at 931/528-6481 (ext. 204) if you have questions about our comments.

Sincerely,

A handwritten signature in cursive script, reading "Lee A. Barclay". The signature is written in dark ink and is positioned above the printed name and title.

Lee A. Barclay, Ph.D.  
Field Supervisor

xc: Mark Fagg, TWRA, Morristown, TN  
Dave Turner, TDEC, Knoxville, TN



**TENNESSEE HISTORICAL COMMISSION**  
DEPARTMENT OF ENVIRONMENT AND CONSERVATION  
2941 LEBANON ROAD  
NASHVILLE, TN 37243-0442  
(615) 532-1550

December 6, 2001

Mr. Tim Slone  
IRTEC  
Post Office Box 306  
Caryville, Tennessee 37714

RE: OSM, U.S. COAL/36-22-04/84-19-01, UNINCORPORATED, CAMPBELL COUNTY

Dear Mr. Slone:

The Tennessee State Historic Preservation Office has reviewed the above-referenced undertaking received on Tuesday, December 4, 2001 for compliance by the participating federal agency or applicant for federal assistance with Section 106 of the National Historic Preservation Act. The Procedures for implementing Section 106 of the Act are codified at 36 CFR 800 (Federal Register, December 12, 2000, 77698-77739).

After considering the documentation submitted, it is our opinion that there are no National Register of Historic Places listed or eligible properties affected by this undertaking. This determination is made either because of the location, scope and/or nature of the undertaking, and/or because of the size of the area of potential effect; or because no listed or eligible properties exist in the area of potential effect; or because the undertaking will not alter any characteristics of an identified eligible or listed property that qualify the property for listing in the National Register or alter such property's location, setting or use. Therefore, this office has no objections to your proceeding with the project.

If you are applying for federal funds, license or permit, you should submit this letter as evidence of compliance with Section 106 to the appropriate federal agency, which, in turn, should contact this office as required by 36 CFR 800. If you represent a federal agency, you should submit a formal determination of eligibility and effect to this office for comment. You may direct questions or comments to Jennifer M. Bartlett (615) 741-1588, ext. 17. This office appreciates your cooperation.

Sincerely,

Herbert L. Harper  
Executive Director and  
Deputy State Historic  
Preservation Officer

HLH/jmb